



ASSISTING VET SCHOOL BOARDS IN DELIVERING SPECIAL EDUCATION SERVICES FOR STUDENTS WITH AD/HD



Different needs but equal rights

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Folkuniversitetet (SE)







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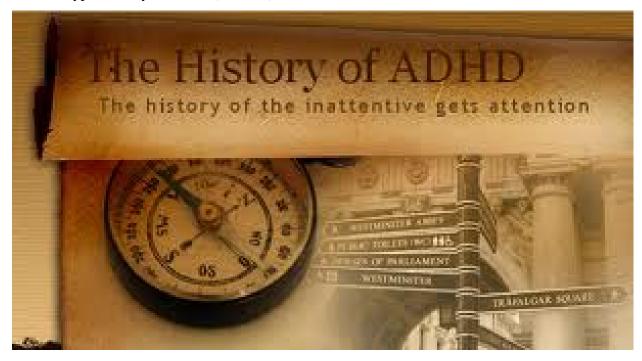
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Introduction Background

Historically attention disorders may be documented as far back as the 1880's in stories about "Fidgety Phil¹." This behaviour disorder has been identified by terms, such as, Minimal Brain Dysfunction, Attention Deficit Disorder With and Without Hyperactivity, Attention Deficit Hyperactivity Disorder, Undifferentiated Attention Deficit Disorder, and Attention Deficit Disorder. In 2000, the American Psychiatric Association adopted the name Attention-Deficit/Hyperactivity Disorder (AD/HD).².



It is currently estimated that up to 5% of school age students are affected by AD/HD. The majority of these students will experience problems adapting to the school environment and this may lead to educational underachievement. As a result, as many as 60% of these students may find it difficult to find, and sustain, paid employment after leaving school. This situation is characterised by huge gaps in knowledge and awareness across the EU about the size, diversity and complexity of AD/HD and also about the diagnostic and treatment implications of such a complex condition. The level of understanding and resources required are misunderstood by the general public, groups and associations of people with AD/HD and by

¹ https://www.drkenny.com/fidgety-phil

² The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) was published May 27, 2013





professionals within the whole of the public and voluntary sector across Europe. AD/HD is possibly one of the most under diagnosed and under treated mental health conditions facing European students and adults. The cost of not diagnosing and treating AD/HD can be very expensive in terms of reduced quality of life and can also lead to a very large financial burden for the community and society as a whole. The early identification, diagnosis and treatment of AD/HD can prevent: family breakdown, exclusion from school, isolation from the community, entry into anti-social lifestyles and behaviours, involvement in crime, substance and alcohol abuse, unemployment and long term benefit claims. A strategic preventative approach could substantially reduce the very expensive lifetime cost of AD/HD which can include such costs as: alternative expensive schooling, police and probation services, courts and prison services.³

AD/HD in an educational context

Attention-Deficit Hyperactivity Disorder (AD/HD) is one of the most frequent diagnoses in schools today. AD/HD is defined as "an illness that is characterized by inattention, hyperactivity and impulsivity". AD/HD is the most commonly diagnosed behaviour disorder among children and adolescents. There are three different types of AD/HD, which are: predominate hyperactivity/impulsivity type, inattention type and combined. Approximately one half to two-thirds of children with AD/HD will continue to have significant problems with AD/HD symptoms and behaviours as adults, which impacts their lives on the job, within the family, and in social relationships.

For teachers to work effectively with these students, they need to understand how this diagnosis presents itself in the classroom. Teachers also need to work through the frustration and behaviours evidenced by these students. Teachers need to be provided with tools that will allow these students to learn and lower the frustration level in the classroom.

Many teachers have sometimes feel frustrated in situations when they meet students who don't really acted as expected. Students may have been rowdy, talked too much, interfered with others, running around in the classroom or been widely rowdy and noisy. Teachers are faced with situations when they really do not know how to manage the classes and they ask themselves how to meet the needs of all kind of students. The question that many times arise

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³ KNOWING ME, KNOWING YOU DAMP-foreningen







in the mind of teacher is that he or she should be there for all students in the classroom or mainly focus on the needs of rowdy and noisy student.

The way in which a teacher perceives a student with AD/HD will dictate the expectations and treatment of that student. Teacher perceptions of these students are based on their experiences in the confines of the classroom and on the limited knowledge about the disorder.

Several research report states that teachers often reported that working with students with AD/HD was very stressful and resulted in a negative interaction. However regardless of the teacher's perception of working with students diagnosed as AD/HD they believed that could achieve academic success.

There are some common themes of biases among teachers toward students diagnosed with AD/HD, as documented in a study⁴. In this study, the teachers were given a questionnaire to complete that included possible biases towards AD/HD students and the teachers abilities to educate this population in a mainstream classroom. The teachers indicated certain biases of students who exhibit AD/HD. Along with the academic biases, there was also evidence of teachers' general attitudes and perceptions of students who exhibit AD/HD. The biases in this area varied from biological aspects of AD/HD to how the symptoms manifest in the classroom. Some teachers indicated that AD/HD is biological and that these students are unable to control their behaviours, while other teachers indicated that they believed that students would grow out of AD/HD. Other opinions and sentiments expressed by teachers included: students who exhibit AD/HD change their behaviours and feelings from class to class and that the students use their diagnosis as an excuse as well as these type of students are not smart enough to take advantages of their services that are being provided.

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⁴ Harrison, P., & Rush, C. (2008). Ascertaining teachers' perceptions of working with adolescents diagnosed with attention-deficit/hyperactivity disorder. Educational Psychology in Practice







According to above study, the first implication is that teachers develop biases through the frustrating classroom experiences with these types of students. These biases include teachers feeling inadequate in their ability to teach these students in structured classroom. These biases impact their effectiveness to teach these types of students. "Teachers with negative perceptions about working with adolescents with AD/HD may be conceptualizing that the task of working with such students is difficult and uncomfortable because they have not received adequate training on AD/HD"

According to same study, the second implication was determined based off of the responses that referred to teachers feeling of inadequacy in the special education system itself. The researchers reported an implication from these particular findings that related to the fact that teachers stated that they lack of education related to general training and classroom management strategies when working with these students. "Teachers with negative perceptions about working with adolescents with AD/HD may be conceptualizing that the task of working with such students is difficult and uncomfortable because they have not received adequate training on AD/HD". Teachers know that these students need more help that they are unable to provide them, they lack helpful materials to help this type of students and are frustrated with amount of challenging students within their classroom. Another study conclude that teachers with positive point of view of students with AD/HD wanted to have more training in teaching and behavioural management skills for students with AD/HD. All teachers may benefit from professional development that highlights the causes of AD/HD, as

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Skolinspektionen. (2011). Gymnasieskolor har svårt att anpassa sig efter behov hos elever med funktionsnedsättning. Hämtad den 21 november 2011 från http://www.skolinspektionen.se/sv/Omoss/Press/Pressmeddelanden/Gymnasieskolor-harsvarigheter-att-anpassa-sig-efter-behoven-hos-elevermed-funktionsnedsattning/







well as, the role they play in the diagnostic process. The behavioural characteristics that are associated with each cause of the disorder should also be discussed. This will allow teachers to use their knowledge of interventions, accommodations, and modifications with the appropriate behaviours in order to help the student reach success⁶.

Purpose of the Guideline

This resource conveys policies, procedures, and guidelines that support the delivery of special education services in VET schools for students with special learning needs mainly focused on AD/HD.

The purpose of this guideline is to provide knowledge and assist school boards in developing programs and services that enable students with special needs to meet the goals of education. The guideline also contains procedural information to assist in accessing programs and services provided at the regional level. It is intended primarily for the use of principals, school-based teams and special educational professionals, but may also prove of interest to other professionals within the education, social service or health care communities, to parents and to members of the public at large.

These guidelines are divided into main parts 1 to 3 and an annex, listed in the Table of Contents.

Policy area

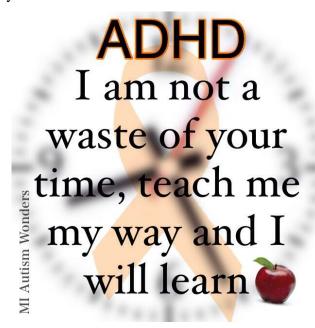
- a) **Mission and vision**: provides policy for the delivery of special education programs and services
- b) **Roles and Responsibilities**: outlines the roles and responsibilities of the ministry, school boards, district and school-based personnel, parents and students in the development and implementation of special education services.
- c) **Individual Education Plan (IEP)**: describes the process of identifying students who have special needs, planning and implementing individual programs for them, and evaluating and reporting on their progress.

⁶ Tufvesson, C. (2007). Concentration difficulties in the school environment – with focus on children with AD/HD, AUTISM and Down's syndrome. Lund, Sweden: Media Tryck





d) **Special Services**: describes services that should be available in school to support service delivery.



Instructional Strategies and Practices

Identifying students with AD/HD: The behaviours associated with AD/HD

Strategy for instruction of student with AD/HD:

Academic instruction: preparing students with AD/HD to achieve by applying the principles of effective teaching

Behavioural interventions: Exhibiting behaviour concerning how to control their impulsiveness and hyperactivity.

Classroom accommodations: Special classroom seating arrangements for AD/HD students

VET trainee at workplace: special accommodation at work for VET students practicing their WBL (work place and tutoring accommodation)

The guideline provide strategies using a school–approach and is designed to:

provide innovative and flexible learning environments through expanding options in education for students with different learning needs





- increase young people's with different learning needs participation, engagement and achievement
- strengthen the quality of support to students with different learning needs and their families especially during periods of transition and times of difficulty
- promote a culture of partnerships between schools and other education providers and agencies in the provision of education and services to students with different learning needs
- create supportive environments in which all can thrive and learn
- enhance the positive mental, social and emotional wellbeing of all who work and learn in schools with focus on students with different learning needs.

Target groups for this guideline

The guideline is designed to assist leadership teams in schools and communities to work with each other and with students with different learning needs and their families to keep young people engaged in education and connected to school. Such teams include, for example, principals, assistant principals, school coordinators, pupil guidance coordinators, curriculum coordinators and other education provider leaders.

AD/HD and its core features in education

AD/HD is a diagnosis applied to students who consistently show characteristic behaviours over a period of time in different settings. The diagnostic behaviours fall into three categories: inattention, hyperactivity and impulsiveness. Students for who inattention is the predominant problem may be given a diagnosis of AD/HD

AD/HD is not visible, but it is noticeable. It tends to be a challenge to focus on one thing at a time when you have AD/HD. But when you really love something you can often concentrate longer than others. It becomes hyper focused. Feelings and ideas can come so fast that you don't have time to think before acting. You might stop the talking, get angry quickly or not think about what they say. Many find it difficult to sit still. Some get thought crowding too. That means thinking of too many things at once and not receive any procedure on the tanks. When the body or the brain can't take it easy you can get sleep problems. People with ADHD





often have strong feelings. Things feel either really great or really boring and it is not in between as much as for others.

Advantages	Disadvantages					
Too much energy to do what one likes	Difficulty to get the peace of mind to rest,					
	sleep or think.					
Generating ideas	Difficulties to remember such things as					
	homework or study books					
Super concentration when something is fun	Inability to focus when subjects are not fun					
or interesting.	_					

Inattention

People who are inattentive have difficulty keeping their mind on one thing at a time so have trouble completing tasks. Signs of inattention include:

- a) Becoming easily distracted by irrelevant sights or sounds
- b) Failing to attend to details and making careless mistakes
- c) Being unable to listen or follow instructions
- d) Being forgetful and frequently losing personal possessions



We anxiously attend to a million things around us while failing to see what's blaring right in front of us.

Hyperactivity

This refers to an excess of physical movement. Signs of hyperactivity may include:

- a) Dashing around constantly as if 'driven by a motor'
- b) Restlessness when seated; squirming and fidgeting with hands and feet
- c) Being unable to remain seated when this is appropriate







Impulsiveness

People who are excessively impulsive are unable to curb their immediate reactions or to think before they act. Signs of impulsiveness may include:

- a) Being unable to take turns or wait in line
- b) Demanding instant gratification of wishes
- c) Blurting out comments without thinking

Many students show similar symptoms at different stages of their lives that may be unexceptional in developmental terms. For example, toddlers and very young students are often very active with a short attention span and adolescents may appear restless and disorganised.









Furthermore, many of the symptoms described above may also arise for reasons unrelated to AD/HD, but which nonetheless indicate the child is potentially suffering from stress (with a range of possible causes) and / or other medical or neuro-developmental condition.

To merit a diagnosis of AD/HD, the behaviours described above must be markedly excessive compared to an average child at the same stage of development, be pervasive across different areas of a child's life and a long term problem, not just a response to a temporary situation.

When does AD/HD constitute a special educational need?

Many pupils with AD/HD may have additional difficulties that can affect their social and educational development. It should not be assumed that these are solely attributable to AD/HD and it is important that they are also considered as separate issues.

As with all students, information gathering should be conducted from within a 'whole child' perspective. Other special educational needs should be identified such as those associated with specific learning difficulties and emotional and behavioural needs. Other agencies may need to be consulted if a child's social or therapeutic needs are felt to be significant. All the above should be taken into account when planning appropriate interventions.

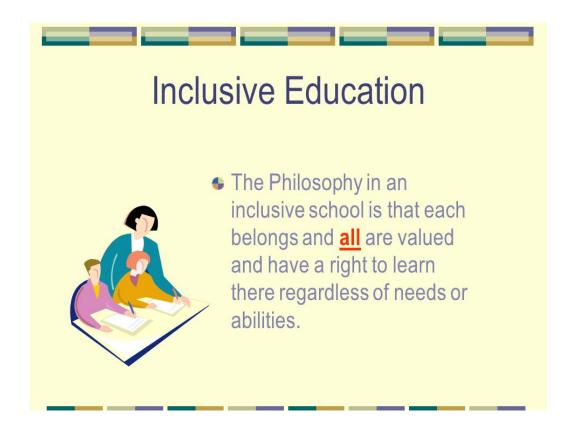
Individual pupils' needs within the social and educational environment of the school will be discussed and monitored at In School Reviews or via the Annual Review of their Statement of SEN if they have one. In this respect, students with AD/HD are similar to other students with SEN.





Towards Inclusive education – Education for all people

Inclusive education means moving away from a 'one-size-fits-all' education model, towards a tailored approach to education that aims to increase the system's ability to respond to learners' diverse needs without the need to categorise and label them. Inclusive education therefore aims to attributing learners' difficulties to schools' inabilities to compensate for different starting positions, rather than to individual weaknesses⁷. There are several justifications for this. First, there is an educational justification: the requirement for inclusive schools to educate all children together means that they have to develop ways of teaching that respond to individual differences and that therefore benefit all children. Second, there is a social justification: inclusive schools are able to change attitudes toward diversity by educating all children together, and form the basis for a just and non-discriminatory society. Thirdly, there is an economic justification: it is less costly to establish and maintain schools that educate all children together than to set up a complex system of different types of schools specialising in different groups of children.



Inclusive education for learners with disabilities, DIRECTORATE GENERAL FOR INTERNAL POLICIES POLICY DEPARTMENT C: CITIZENS' RIGHTS AND CONSTITUTIONAL AFFAIRS,





The concept

Inclusive education is a combination of pedagogical practices that allow each student to feel respected, confident and safe so he or she can learn and develop to his or her full potential. It is based on a system of values and beliefs emphasising on the best interests of the student, which promotes social cohesion, belonging and active participation in learning, a complete school experience, and positive interactions with peers and others in the school community. These values and beliefs will be shared by schools and communities.

Inclusive education is put into practice within school communities that value diversity and nurture the well-being and quality of learning of each of their members. Inclusive education is carried out through a range of public and community programs and services available to all students. The provision of inclusive public education is based on three complementary principles:

- 1. Public education is universal the provincial curriculum is provided equitably to all students and this is done in an inclusive, common learning environment shared among age-appropriate, neighbourhood peers
- 2. Public education is individualized the success of each student depends on the degree to which education is based on the student's best interests and responds to his or her strengths and needs
- 3. Public education is flexible and responsive to change

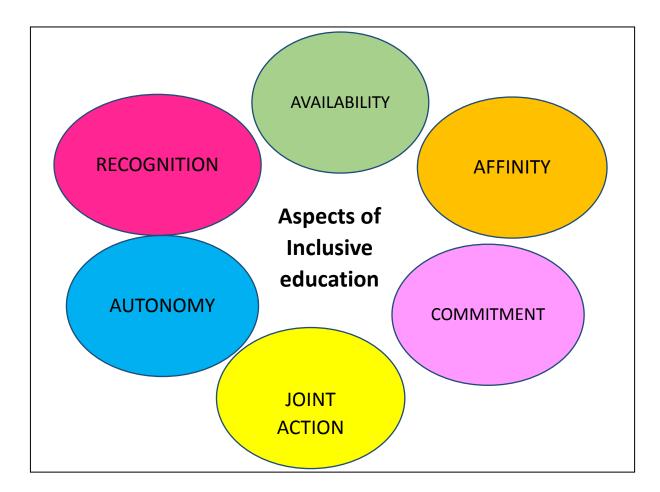
The aims of inclusive education are:

- a) Encourage whole-school and individual reflective engagement and discussion on the development of inclusion
- b) Support school professionals to plan, implement and review inclusive policies and practices
- c) Outline and demonstrate processes of individual and organisational planning and implementation
- d) Document schools' current and developing inclusive practices and record constraints and resources associated with inclusion
- e) Foster an ongoing individual and organisational commitment to inclusive practices and policies.





Inclusive education means that all students should have equitable access to learning, opportunities for achievement, and the pursuit of excellence in all aspects of their educational programs.



Special education programs and services enable students with special needs to have equitable access to learning and opportunities to pursue and achieve the goals of their educational programs.

Availability

All students have the right to an accessible learning environment. A prerequisite for participation is that students have access to the school's various activities and that they can participate in them. Students 'needs are different but it's the school's responsibility and challenge to take that into account. Students 'participation is in constant change and negotiation. Various activities throughout the school day have different requirements, and the level of participation changing from situation to situation. A student who is perceived as







uninterested in a task can be in an environment with major gaps in availability. In fact, it's the inaccessible environment that leads to the student's low commitment, not a lack of interest in the task.

Example

Problem with regards to availability expressed by students with AD/HD is that they sometime cannot focus enough when teachers are giving instruction to the next task or group work. The result is that they feel outside the class environment. It is important that the teachers start the lecture with clear instructions of what is expected of students during the lecture with regards to exercises, tasks and group work. Another solution is that the students with AD/HD start the lecture earlier with instructions of what is going to be done during the lecture.

Affinity

Affinity means that two or more persons are included in the same act, simply doing things together, like to be with others in a working group in the classroom, the sport activities at school, or conversations in the hallway. To be in the same act does not necessarily mean that it performs in the same way as others. To be in the same act, it is important that participants feels like being one in the group.

Example

Separating some students sends signals to other students that some in the class are different. As example when all students decide where to sit but some students are assigned places. Some teachers are afraid that students with AD/HD will not manage group work or can disturbed other students in group work and make decisions for them.

Recognition

Commitment is about how the ambient treatment affects the individual's experience of being seen, included and respected, in other words, recognition is other's subjective view of the pupil. Recognition of students' participation in the various activities is more prevalent in a school that has an inclusive approach and where diversity and student diversity is prevailed. Tolerance to all contribute in different ways and to different degrees promotes students' recognition of each other.







Example

Most of the time, teachers tend to talk about the student with their parents but not with them. The students with AD/HD feel being left outside and misunderstood. In interviews, students with AD/HD express the experiences of eating alone or sitting alone during breaks, not being seen or included since they are not recognised as equals.

Commitment and engagement

Engagement is a self-perceived aspect of participation. The student has to talk about their experiences and thoughts, it may be that the commitment is not perceived by others. Commitment cannot be demanded but be motivated by good conditions. By increasing availability, a school can raise the level of commitment.

Example

In interviews, students with AD/HD say that it is easier to stay focused on anything is funny or interesting. Is it boring, then they give up. They need encouragement and support to maintain engagement. Too little challenge pulls down commitment from students with AD/HD.

Autonomy

Autonomy involves the individual's ability to control their actions, and to have influence over what to do, how to do it and with whom. That the student has influence over their situation and given the opportunity for self-determination. In school, all students have to follow rules, schedules and demands of school work to comply with, but autonomy in this context stands for everyone to be given equal opportunities to self-determination.

Example

Most of the time, students with AD/HD are forced to sit and work with task that they already know how to do. They get too few challenges and think that the tasks are too easy. When they bring forward their requests, they feel nobody listen to them. Students need to feel that they themselves have influence and can influence their school environment. It is about access to information, the ability to consider different options and be able to be autonomous in relation to peers and school work





Definitions

"Student with special needs:" A student who has a disability of an intellectual, physical, sensory, emotional or behavioural nature, has a learning disability or has special gifts or talents, as defined in legislation.

"Individual education plan (IEP):" An individual education plan designed for a student that includes one or more of the following:

- learning outcomes that are different from, or in addition to, expected learning outcomes set out in the applicable educational program guide,
- A list of support services,
- A list of adapted materials, instruction or assessment methods.

"Adaptations": teaching and assessment strategies made to accommodate a student's special needs, and may include alternate formats (e.g., braille, books-on-tape), instructional strategies (e.g., use of interpreters, visual cues and aids) and assessment procedures (e.g., oral exams, additional time, assistive technologies).

"Modifications": learning outcomes that are substantially different from the regular curriculum, and specifically selected to meet the student's special needs.

Areas needed in vison and mission of school with regards to inclusive education for student with special needs

Inclusion: school policy promotes an inclusive education system in which students with special needs are fully participating members of a community of learners. Inclusion describes the principle that all students are entitled to equitable access to learning, achievement and the pursuit of excellence in all aspects of their educational programs. The practice of inclusion is not necessarily synonymous with full integration in regular classrooms, and goes beyond placement to include meaningful participation and the promotion of interaction with others.

Placement: A school board or principal offers to consult with a parent of a child who has special needs regarding the student's placement in an educational program. A school policy must provide a student who has special needs with an educational program in a classroom



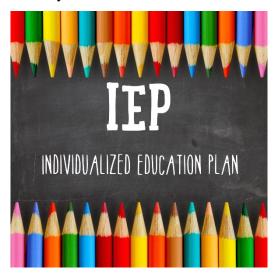


where the student is integrated with other students who do not have special needs, unless the educational needs of the student with special needs or other students indicate that the educational program for the student with special needs should be provided otherwise.

The emphasis on educating students with special needs in neighbourhood school classrooms with their age and grade peers.

Education Plan (IEP): A school board must ensure that an Individual Education Plan (IEP) is designed for a student with special needs as soon as practical after the board identifies the student as having special needs. The only instances in which an IEP is not required are when:

- The student with special needs requires little or no adaptations to materials, instruction or assessment methods; or
- The expected learning outcomes have not been modified; or
- The student requires 25 or fewer hours of remedial instruction by someone other than the classroom teacher, in a school year.



A school must ensure that the IEP is reviewed at least once each school year, and where necessary, is revised or cancelled.

A school board must offer the parent of the student, and where appropriate, the student the opportunity to be consulted about the preparation of the IEP.

A school policy must offer each student who has special needs learning activities in accordance with the IEP designed for that student. When services are so specialized that they cannot be replicated in every school, they should be available at the district level/regional level, or else school districts should arrange to obtain them from community or other sources.





Practical steps towards inclusive education for including special learning needs

Developing a School Mission Statement for inclusive education

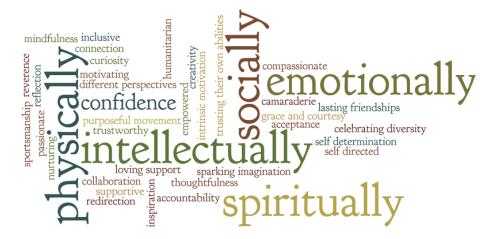
The development of policy Vision and mission) statement is a challenging process for schools because it involves a process of reaching consensus on core values and guiding principles. Once this consensus has been reached it is expressed in the mission statement.

Key steps in drawing up a Mission Statement

- i. Identification of personal values with the staff
- ii. Discussion of values in the light of the educational philosophy and values expressed by the Trustees
- iii. Consensus on staff's core values
- iv. Drawing up of a draft statement by a school committee as a basis for consultation
- v. Consultation with school partners
- vi. Redrafting in the light of the responses received, followed by further consultation and redrafting if necessary
- vii. Achievement of consensus leading to ownership of the mission statement by the school community
- viii. Ensuring that the mission is delivered in action
 - ix. Reviewing mission statement after a period of time







Developing a Mission Statement:

This section presents a selection of **Core Activities** and sample **Worksheets** which may be helpful to schools in organizing the process of Developing a Mission Statement and Clarifying Values with regards to students with different learning needs.

Core Activities 1, 2 and 3 are activities for Developing a Mission Statement. Schools may use whichever of the 3 activities best suits their needs.

Core Activity 4 is a Values Clarification exercise which may be used to establish a working position in relation to values and guiding principles with regards to students with different learning needs. If a school has decided to postpone work on a formal mission statement. Alternatively, it may be used to initiate the process of formulating a mission statement.

Activity 1: Developing a Mission Statement

Worksheets: Staff Questionnaire on the School's Original Purpose: Open-

ended questions

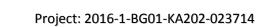
Staff Questionnaire on the School's Present Purpose: Open-

ended questions

Activity 2: Developing a Mission Statement

Worksheet: Staff Questionnaire to Identify Core Values: Open-

ended questions







Activity 3: Developing a Mission Statement

Worksheets: Staff Questionnaires: Open-ended questions

Activity 4: Values Identification and Clarification:

Worksheet: Identifying and Prioritising Fundamental Values

The above process should be guided by the concept of inclusive education. That means all the questionnaires should be based on the simple idea that every student and family is valued equally and deserves the same opportunities and experiences. Inclusive education is about student with special learning needs. It's about building friendships, membership and having opportunities just like everyone else.

CORE ACTIVITY: DEVELOPING A MISSION STATEMENT

Developing a policy (mission and vision) statement based on equal opportunity for students with special learning needs means different and diverse students learning side by side in the same classroom. They enjoy field trips and after-school activities together. They participate in student government together. And they attend the same sports meets and plays.

Inclusive education values diversity and the unique contributions each student brings to the classroom. In a truly inclusive setting, every child feels safe and has a sense of belonging. Students and their parents participate in setting learning goals and take part in decisions that affect them. And school staff have the training, support, flexibility, and resources to nurture, encourage, and respond to the needs of all students.

Instruments:

- i. Staff Questionnaire on School's Original Purpose: Open ended questions (Annex 1)
- ii. Staff Questionnaire on School's Present Purpose: Open ended questions (Annex 1)
- iii. Pages of flip-chart





Procedure:

Individual Reflection 1: (10minutes)

- i. Individuals reflect on Questionnaire on School's Original Purpose (Annex 1)
- ii. Individuals record their responses

Group Discussion No. 1: (20minutes)

- i. Staff are broken into groups to discuss their individual responses and agree a group response
- ii. Group responses to the Questionnaire for the plenary session are recorded on a flip-chart

Plenary Session 1:

- i. Feedback on the flip charts from each group is read out by a member of each group and it is then displayed on a wall.
- ii. Responses in common are identified and recorded

Individual Reflection 2: (10minutes)

i.Individuals reflect on Questionnaire on School's Purpose Today (Annex 1)

ii.Individuals record their responses

Group Discussion No. 2: (20minutes)

- i. Staff are broken into groups to discuss individual responses and agree a group response
- ii. Group responses to the Questionnaire for the plenary session are recorded on a flip-chart

Plenary Session 2:

- i. Feedback on the flip charts from each group is read out to the whole staff by a member of each group. It is then displayed on a wall beside their first sheet.
- ii. Feedback from the two questions is compared and similarities and differences between the School's Original Purpose and the School's Purpose Today are identified





- iii. On the basis of this comparison the key values to guide the school in the future are identified and recorded on a flip-chart
- iv. Staff are then asked how they can reinforce and develop further the values identified. Suggestions are recorded on a flip-chart

FOLLOW-UP:

- a. At the end of Activity 1 arrangements are made to advance the development of the mission statement:
- b. A committee is established to draw up a draft mission statement based on the core values identified
- c. The committee circulates the draft mission statement to the individual members of staff for their views
- d. The committee revises the draft statement in light of the staff responses and presents it to the whole staff at a meeting
- e. The committee draws up of a draft statement as a basis for consultation with school partners
- f. Consultation with school partners takes place
- g. Redrafting occurs in the light of the responses received, followed by further consultation and redrafting if necessary
- h. Consensus is achieved, leading to ownership of the mission statement by the school community
- i. Steps are devised to ensure that the mission is delivered in action
- j. A time-frame for the future review of the mission statement is established

Content of the mission

The final mission and vision of the school with regards to student with different learning needs should cover following areas:





Vision Statement

The vision of TUHS is to provide an academically cohesive educational program within and between all departments on campus to ensure all students obtain essential skills necessary to become educated and productive citizens.

Mission Statement

The TUHS mission is to provide the community with a comprehensive public high school where all students receive the best possible education in a safe and secure environment. This must include responsible use of the human and physical resources of the district and an ongoing assessment of the educational programs. These objectives will be achieved by the combined efforts and input of our staff, students and community, which includes parents, businesses, industry and all other levels of education. The TUHS educational programs provide a level of academic excellence, which will help students in the development of:

- A basic core of knowledge that will enable students to participate productively as citizens and pursue their aspirations be that at home, in the workforce, through advanced training, or at colleges and universities.
- The ability to gather, organize and analyze information and apply it to solving problems and making decisions.
- The self-discipline to work independently and the confidence to work collaboratively.
- The ability to recognize the similarities and differences in individuals and cultures in ways that are mutually beneficial.
- An adaptability to change by recognizing opportunities for learning and growth throughout their lives.

Standards

The mission and vision should clarify standards for all students, including students with special needs, are developed with high but appropriate expectations for student achievement. Students with special needs are expected to achieve some, most, or all provincial curriculum outcomes with special support.

Where a student with special needs is expected to achieve or surpass the learning outcomes, performance scales, letter grades and regular reporting procedures will be used to indicate progress. Where it is determined that a student with special needs is not capable of achieving the learning outcomes of provincial or Board/Authority Authorized curriculum, and substantial course or program modification is necessary, specific individual goals and objectives will be established for the student in his or her IEP. Performance scales, letter grades, and structured written comments may be used to report the level of the student's success in achieving these modified goals and objectives. It may not be appropriate to provide letter grades to all students with special needs. Considering the potential impact on the student, not providing letter grades should be a decision made by the school based team.







Where a professional support person other than the classroom teacher is responsible for providing some portion of the student's educational program, that person should provide written reports on the student's progress for inclusion with the report of the classroom teacher.

Delivery of education

Development and delivery of special education programs and services at the local level should involve meaningful consultation with the parents or guardians of students with special needs, since they know their students and can contribute in substantial ways to the design of appropriate programs and services for them.

Services in districts should be organized along a continuum which reflects the diversity of students' special needs and the prevalence of various special needs in the school population.

It is important to note that although the text of these guidelines is organized with a focus on each area of special need this is not meant to imply that services and programs should be organized or delivered along categorical lines. The important factor is to match the identified special need of the student with service provisions to address them.

Training of teaching staff

An ongoing staff development plan is essential for all staff so they can more successfully meet the special needs of students. Districts should ensure that all personnel who work with students with special needs have access to relevant in-service training opportunities in order to foster evidence-informed practice. For specialized personnel, there is a need to focus on opportunities within their area of specialty and the specific roles they play in the service delivery system.

School Procedures

Local policies and procedures for special education should be congruent with practices in regular education programs, with special accommodation as necessary for addressing special needs.

School policies and procedures should include:

- a) a description of services and special program options available for the school;
- b) procedures used to identify, assess and plan for students with special needs;
- c) procedures used to effect special placements should they be needed;





- d) reporting and record-keeping procedures used to track Individual Education Plans;
- e) procedures used to include parents and other service providers in identification, assessment and planning;
- f) procedures to be followed in evaluating and reporting on the progress of students with special needs;
- g) procedures for evaluating special education services and programs;
- h) specialist staff assignments and job descriptions that include any necessary specialist qualifications

Role and responsibility

Responsibility for delivering educational programs and related services for students with special needs should be clearly identified in the organization of the school or school district. Roles within the organization should be clearly differentiated to ensure accountability and to enhance co-ordination in the delivery of the educational program. School board/principal should ensure that their staff recruitment, selection, and assignment procedures encourage the availability of personnel with the range of training and skills necessary to provide educational programs for a broad range of students with special needs. Responsibility for the evaluation of staff assigned to work in specialized assignments should be clearly spelled out.

The teacher responsible for a student with special needs is responsible for designing, supervising and assessing the educational program for that student. Where the student requires specialized instruction, this is best done in consultation with resource personnel available, with the parents and with the student. Where the student's program involves specialized instruction by someone other than the classroom teacher, collaborative processes are required to make best use of the expertise of the specialists available to assist and to ensure a coordinated approach. In VET schools, where several teachers/mentors/tutors may be involved in the student's program, co-ordinated planning is especially important.

Teachers are expected to design programs for students with special needs. Teachers' assistants play a key role in many programs for students with special needs, performing functions which range from personal care to assisting the teacher with instructional programs. Under the direction of a teacher they may play a key role in implementing the program.





While teachers' assistants may assist in the collection of data for the purpose of evaluating student progress, the teachers are responsible for evaluating and reporting on the progress of the student to parents.

How to develop an Individual educational plan (IEP)

Process

For purposes of discussion, the planning process is divided into five phases:

- a) identification/assessment;
- b) planning;
- c) program support/implementation;
- d) evaluation; and reporting.

Together, they constitute a process which is continuous and flexible, rather than a series of five separate and discontinuous phases. Wherever possible, the process should be incorporated into the regular routines of planning, evaluation and reporting that occur for all students. There should be a progressive flow from one phase to another, so that, according to need, supports can be obtained in a timely way from within the school, the district, the community and/or from regional or provincial services.

The process works best when:





IEP Planning Form - Sample

IEP Objectives	Regular Class Activities									
	Arrival	Journal Writing	Recess	Language Arts	Lunch	Physical Education	Social Studies	Science	Dismissal	
Develop Social Skills	Practice greeting people by name	Use communication book with teacher assistant	Participate in organized games	Take part in co-op reading group	Practice courtesy rules during eating and socializing	Practice taking turns	Work at center with peer helper	Work at center with peer helper	Line up with friends to wait for parent	
Improve Decision Making	Choose place in line	Pick topic from communication book	Pick between two games	Choose book for group to read	Decide order to eat food	N/A	Decide between two centers	Decide between two centers	Choose who to stand with in line	
Staying on task	Complete routine of storing belongings	Stay on task for 10 minutes	Stay with the game chosen	Remain in groups during activity	Finish lunch and remain seated for 15 minutes	Stay in group for activity	Stay in each center for at least 10 minutes	Stay in each center for at least 10 minutes	Complete routines of retrieving all belongings and take work home	
Participating in Group Activities	Enter with classmates	N/A	Play with classmates	Answer questions about story	Help with clean up groups	Play with peers	Peer pairs	Peer pairs	Exit with classmates	
Lengthen Interacting Behavior	Extend greeting to interaction with communication book	Connect communication from two pages in the communication book	Stay with game as long as peers do	Use more than one page in book to answer questions	N/A	Practice gesture communication with peers in group	Increase peer sessions to 15 minutes	Increase peer sessions to 15 minutes	N/A	

- a) There is collaboration and ongoing consultation among teachers, administrative and support personnel, parents, students and representatives of district/community/regional agencies.
- b) Parents/guardians and students have the opportunity to be active participants in the process, to initiate discussions regarding the learning needs or request school-based access to support. They should feel welcome and encouraged to contribute throughout the process, and are important partners in the development of the Individual Education Plan (IEP). As a rule, students should be included in all phases of the process unless they are unable or unwilling to participate.
- c) Staff members have the support of in-service and other resources available to them. For example, a teacher should have access to specialist support, help with informal assessment procedures or suggestions for pre-referral intervention strategies.





d) Individual schools establish procedures to support collaborative consultation and planning. Staff should be identified within each school to be available for consultation and to be part of a school-based team. This team should be established with clear procedures to provide support, consultation, planning, case management, and, when appropriate, to facilitate inter-ministerial or community approaches.

Procedures should be in place to:

- a) ensure information is promptly shared;
- b) plan for and facilitate transitions;
- c) ensure consistency in reporting and documenting plans;
- d) promote communication and collaborative decision-making between the school and home;
- e) Communicate planning decisions to parents, students and appropriate staff; and resolve differences effectively.

Early identification

The process

Early identification is an essential element of successful program planning for students with special needs. Students may be identified before they enter the school system. In such cases, existing assessment and programming information should be requested without undue delay to permit planning.

In cases where students with special needs have been identified prior to enrolment, or when students have obvious and severe special needs, which have not been previously identified, the school-based team should respond promptly to a teacher's request for a determination of the need for assessment, planning and intervention. For most students, the identification/assessment phase begins in the classroom, as the teacher observes exceptionalities in learning and behaviour. The teacher responds by entering the first phase of the process, initiating in-depth, systematic classroom observation and evaluation. Further, while beginning a comprehensive assessment of learning needs, the teacher should also introduce variations in instructional approaches, evaluating the success of using such teaching techniques and instructional materials with the student.







The teacher should consult with the parent and, when appropriate, the student regarding concerns and progress. The teacher should discuss with the parent the appropriateness of a referral to a physician for a comprehensive medical examination to exclude the possibility of a medical basis for the concerns. If these efforts prove insufficient to meet the student's educational needs the teacher should embark on a process of consultation and collaboration with the school-based resource personnel. This may take the form of classroom observation, additional assessment, the consideration of additional classroom intervention strategies, and implementation of those strategies. For many students, such collaborative planning and the resulting interventions will successfully address the student's needs. However, if this is not the case, the teacher can approach the school-based team for further assistance.

An identification team is an on-going team of school-based personnel which has a formal role to play as a problem-solving unit in assisting classroom teachers to develop and implement instructional and/or management strategies and to co-ordinate support resources for students with special needs within the school. The school-based team includes a small group of regular members, usually including a school principal, a learning assistance or resource teacher, a classroom teacher and a counsellor. On a case-by-case basis as needed to plan for individual students, the team should also include the student's referring teacher, and involve the parent, the student, and, as appropriate and district resource staff.

Upon the request of the referring teacher or parent, it provides support through extended consultation on possible classroom strategies, and may become a central focus for case management, referrals and resource decisions. It should appoint a case manager, identify the need for additional services and/or initiate referrals to access other school, district, community or regional services. The school-based team can also initiate or facilitate inter-ministerial planning and service delivery.





Individual Education Plan (IEP) according to EQAVET Quality Cycle

Step 1 - Planning of Individual Education Plan (IEP)

At its core the planning process is the same for all students: it is a collaborative process in which the student, the parents and educators identify educational goals that are appropriate to the student, and the ways of attaining them. For students with special needs it is important that



The planning process begin at school entry or as soon as their special needs become known. This process results in an Individual Education Plan (IEP) which identifies appropriate goals and objectives, and describes the nature of the commitments which the educational system makes to assist the student in attaining these goals and objectives.







Over the length of their school experience, students with special needs may experience a number of significant transitional steps: from home to kindergarten, from elementary school to secondary school, from program to program, from one school to another, from school to adulthood. Careful and sensitive planning should be undertaken within an IEP that addresses the needs of the student and the family members involved as they pass through each transition. Early introduction to the new environment or staff, assignment of a school "buddy", or early provision of information on timetables and school organization are examples of transition support.

It is important that students with special needs take an active role in the design of their IEPs to the maximum extent that their developmental level and ability permit. Factors affecting student participation in the development of an IEP include: age, level of maturity, and capacity for sustained, considered deliberation based on awareness of possibilities and consequences.

For students with special needs moving into adulthood, transition planning is a key element of their Individual Education Plan. This transition planning should include a statement of transition goals and, where appropriate, should identify inter-agency responsibilities or linkages that should occur before the student leaves the school setting. The school is in a key position to provide a variety of co-ordinated activities that lead to employment and/or further education for students with special needs. The commitment should be to early, collaborative and well-planned transitions from school to further training, supported work, or other environments. The success of an individual student in accessing post-secondary options and necessary supports for the future depends in part on consistent information flow and advanced planning, as well as establishing firm linkages with other available agencies and community partners. The transition plan in the IEP should incorporate the elements outlined in the Graduation Portfolio Transition Plan which include career, education and personal goals.

The content of Individual Education Plan (IEP)

An IEP is a documented plan developed for a student with special needs that describes individualized goals, adaptations, modifications, the services to be provided, and includes measures for tracking achievement. It serves as a tool for collaborative planning among the school, the parents, the student (where appropriate) and, as necessary, school district personnel, other ministries and/or community agencies.





Typically an IEP includes individualized goals with measurable objectives, adaptations and/or modifications where appropriate, the strategies to meet these goals, and measures for tracking student achievement in relation to the goals. It also documents the special education services being provided as these relate to the student's identified needs. Some students require small adaptations and minimum levels of support; other students with more complex needs may require detailed planning for educational modifications, adaptive technologies, or health care plans. The IEP will reflect the complexity of the student's need and, accordingly, can be brief or more detailed and lengthy.

The development of an IEP serves a number of purposes:

- a) It formalizes planning decisions and processes, linking assessment with programming.
- b) It provides teachers, parents, and students with a record of the educational program for an individual student with special needs, and serves as the basis for reporting the student's progress.
- c) It serves as a tool for tracking individual student learning in terms of agreed-upon goals and objectives.
- d) It documents the relationships between any support services being provided and the student's educational program.
- e) It provides parents and students with a mechanism for input into the individualized planning process.

The IEP document does not describe every aspect of the student's program. It makes reference to those aspects of the education program that are adapted or have been modified, and identifies the support services to be provided. IEP learning outcomes are often described as goals and objectives.

An IEP must have one or more of the following:

- a) the goals or outcomes set for that student for that school year where they are different from the learning outcomes set out in an applicable educational program guide; or
- b) a list of the support services required to achieve goals established for the student; or
- c) a list of the adaptations to educational materials, instructional strategies or assessment methods.

An IEP should also include the following:

- a) the present levels of educational performance of the student;
- b) the setting where the educational program is to be provided;





- c) the names of all personnel who will be providing the educational program and the support services for the student during the school year;
- d) the period of time and process for review of the IEP;
- e) Evidence of evaluation or review, which could include revisions made to the plan and the tracking of achievement in relation to goals; and plans for the next transition point in the student's education (including transitions beyond school completion) and linkages to Graduation Portfolio during Grades 10-12.

Where the goals established for the student are different from the expected learning outcomes for the age or grade, these should

- a) Be set at a high but attainable level to encourage parents, students and staff to hold high expectations.
- b) Be accompanied by measurable objectives developed for each goal to enable IEP review and evaluation.

The IEP may be brief, or it may be more detailed and complex, depending on the complexity of the student's needs. For example, the IEP for a student who needs examinations with adaptations and support with note-taking can be relatively simple. In contrast, a student with multiple disabilities who requires the involvement of a variety of professionals, adaptive technologies and major curricular modifications will require a much more extensive IEP.

All students with special needs must have an IEP. An exception can be made if:

- a) the student with special needs requires no adaptation or only minor adaptations to educational materials, or instructional or assessment methods;
- b) the expected learning outcomes established by the applicable educational program guide have not been modified for the student with special needs; and
- c) The student with special needs requires in a school year, 25 hours or less remedial instruction, by a person other than the classroom teacher in order for the student to meet the expected learning outcomes.

Some students will require services and supports provided by agencies in the community. For example, some students may need medical or therapeutic services offered through child development centres or clinics; others may require the support of a mental health worker or a drug rehabilitation counsellor, or the services of a social worker or a probation officer.

It is essential that school and community services be co-ordinated to avoid duplication, and to ensure consensus regarding goals, consistency in interventions and an integrated approach to





service delivery. The school-based team should be responsible for co-operating with these community services, and plays a key role in:

- a) keeping school staff informed of services available in the community;
- b) acting as a referral source for these community supports;
- c) through the case manager, planning the delivery of services with community partners;
- d) ensuring school-based services are co-ordinated with community services;
- e) documenting in the IEP the community services provided and those responsible for delivering them;
- f) assisting in the review and evaluation of service delivery;
- g) facilitating and planning the transition of students from the school to the community;
- h) documenting the need for services; and
- i) Facilitating the continuity of co-ordinated supports when students transfer between schools/districts.

Planning and service delivery works best when parents and students are active participants in the process. With older students who live independently, however, parent participation may not be appropriate.

Step 2. Implementing Individual Education Plan (IEP)

Program support/implementation is putting into practice the plans, strategies and support agreed upon in the IEP. Prior to implementing the IEP:

- a) Plans need to be understood and supported by those involved, including the student.
 This is particularly critical in secondary schools.
- b) Every effort should be made to ensure resources are in place, including necessary inservice (e.g., evidence-informed teaching strategies).

Implementation works best when:

- a) it is sensitive to cultural, linguistic and experiential factors;
- b) it is based on the IEP;
- c) it incorporates observation, assessment and evaluation to refine and/or validate goals, strategies, etc.;
- d) it is carried out through collaborative consultation within the school, and/or with other ministries and/or community agencies; and
- e) The student with special needs is seen as first a student and not defined exclusively by those special needs.





Implementation usually includes one or more of the following:

- a) adaptations to make the learning environment more accessible;
- b) alternate approaches to instruction and/or evaluation;
- c) use of adaptive/assistive technologies;
- d) provision of intensive, direct instructional intervention (e.g., remedial, compensatory);
- e) modifications to the curriculum content;
- f) provision of services that are beyond those offered to the general student population and are proportionate to level of need.; and/or

Step 3. Evaluation of Individual Education Plan (IEP)

Wherever possible, students will be evaluated using standards established for other students and on all components of their program, including those that have been modified and those that have not. It is important that evaluation and reporting procedures accommodate the range of adaptations and modifications, so as to recognize that students with special needs may:

- a) take part in the regular program with some adaptations (i.e., the student is following the same curriculum but aspects of the program require adaptation);
- b) take part in the regular program but have some modified components (i.e., in some areas, the expected learning outcomes are substantially different from the regular curriculum; for example, math may be totally individualized, with a life-skills orientation); and/or
- c) Participate in a program that is completely modified (e.g., a student with profound intellectual disabilities whose program may focus on independence and self-care skills).

Step 4. Revising Individual Education Plan (IEP)

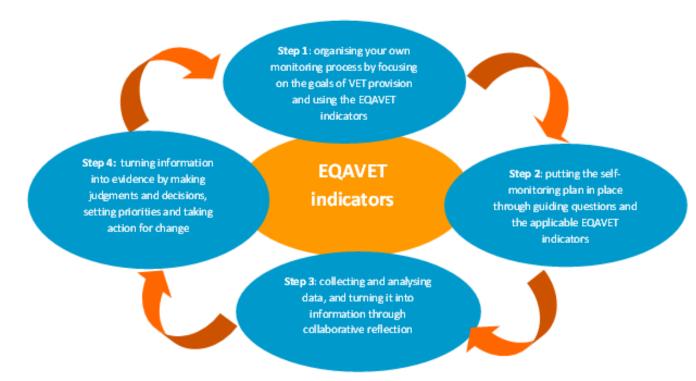
There are many students whose learning outcomes are identical to those of their classmates, but for whom teachers use adapted evaluation procedures (e.g., an oral exam rather than a written one). Use of adapted evaluation procedures should be noted in the student's IEP. For these students, evaluation is based on whether the learning outcomes for the course/program have been met. The methods of evaluation and reporting progress must be consistent with ministry grading and reporting policies for the VET program.





Some students may require extensive modifications to their program. Some or all of their learning outcomes will be substantially different from the regular curriculum. Evaluation will be based on the degree to which such outcomes are achieved. In this case, evaluation must be referenced to individually established standards.

Parents can assist the school in achieving and evaluating progress toward learning outcomes particularly with respect to achievement of social goals, acquisition of life skills, and career exploration and development.



Students with other ethnic background

Learning another language and new cultural norms, adjusting to a different social and physical setting, or overcoming homesickness or trauma can affect a student's school adjustment and learning. These factors, when combined with a disability or impairment, can significantly undermine school achievement. Assessing and planning for students with special needs becomes more complex when language, cultural or migration factors are involved.

Except for cases of obvious disability (e.g., profound intellectual disability, physical or sensory disability), teachers should fully consider cultural, linguistic and/or experiential factors that can affect learning before assuming the presence of a disability or impairment. Consideration should be given to prior educational experience, and the student should be





allowed sufficient time for second-language learning and social adjustment. Students may need additional support for language development, and academic upgrading (e.g., math), or assistance with social integration, without necessarily presenting with a disability.

When assessing and planning for students with special needs with different cultural or linguistic backgrounds, teachers should:

- a) Communicate with the parents regarding the student's progress and discuss the factors which may be affecting learning. It is important to obtain a developmental and educational history, and parental perceptions and expectations regarding schooling.
- b) When language is a barrier, use an interpreter for communicating with the parent or the student to assist with meetings, assessments and planning sessions. The interpreter should be an adult who is familiar with the language and the culture of the parents and student.
- c) Request testing of the student's vision and hearing, and, if appropriate, a medical examination. Examiners should be alerted to cultural, linguistic or experiential factors.
- d) Be aware of and sensitive to cultural factors that may influence the relationship between the teacher and parents, the developmental and educational expectations as well as parental beliefs about special needs.

Teaching students with Attention Deficit Hyperactivity Disorder

How might the child with AD/HD present in class?

Look out for the child who, to a significant and inappropriate degree...

- ✓ Is often off-task
- ✓ Doesn't finish their work
- ✓ Makes careless mistakes
- ✓ Appears lazy / disinterested
- ✓ Daydreams / appears not to listen
- ✓ Misses instructions / asks for things to be repeated
- ✓ Can't seem to focus
- ✓ Is unable to maintain effort over time
- ✓ Is forgetful / disorganised

and / or

✓ Talks excessively







- ✓ Shouts / blurts out answers
- ✓ Interrupts / intrudes on others
- ✓ Can't wait their turn
- ✓ Doesn't wait to hear instructions
- ✓ Is restless / fidgety
- ✓ Is frequently out of their seat
- ✓ Is always "on the go"

When we understand the types of difficulties students with AD/HD have to cope with, we can imagine how tough school life can be for them. Students with AD/HD have difficulty:

Screening out unwanted stimuli

Everything screams for the attention of the child with AD/HD: the hunger pangs in their stomach, the noise of the distant lawn mower, thoughts about the football match, the pencil dropped by the child behind them. The teacher's voice is only a small distraction! Imagine yourself sitting in an important lecture trying to concentrate on the speaker's voice while two of your favourite films are showing at full volume in the conference room, your mobile is ringing, your friend is waving through the window and the person next to you keeps chatting to you. This might help you to imagine how the distractions of a normal classroom affect the child with AD/HD.





Too often we forget that discipline really means to *teach*, not to punish. A disciple is a student, not a recipient of behavioral consequences.

- Dr. Dan Siegel, The Whole-Brain
Child

Monitoring and regulating their own behaviour

Students with AD/HD are poor self-monitors. They often require high levels of feedback to let them know what they are doing right and wrong. When these students hear, "Stop that!" they may not actually know to which behaviour the teacher is referring.

Inhibiting inappropriate verbal and physical responses

It's not that the child did not know it was a bad idea to throw the paper aeroplane; it's just that they knew it after they threw it! The mechanisms that allow us to think before we speak or act are affected in AD/HD.

Knowing how much concentration is needed for a task

We know that it requires greater effort to read an academic journal than it does to read a magazine and we allocate mental effort accordingly. This is difficult for the child with AD/HD.







Sustaining attention for prolonged periods

Students with AD/HD may start an activity with great enthusiasm but they find this difficult to sustain. Pupils with AD/HD have learning needs that are best met through strategies for teaching and classroom management that have relevance for all pupils. Teachers will need to ensure that the learning environment and their teaching style compensates for the difficulties with distractibility, limited organisational skills and low tolerance of frustration that these students experience.

Teaching guidelines

The following guidelines are based on current research literature and suggestions about models that have been found to be useful in working with students with AD/HD. The decision to use a particular strategy must be based on an understanding of the individual child's educational, behavioural and emotional needs. The professional judgement of individual teachers is valued. Their skill in recognising pupil need and in managing an effective learning environment with conflicting demands is recognised.

The principals

1. Rules and instructions provided to students with AD/HD must be clear, brief, and often delivered through more visible and external modes of presentation than are required for the management of students without AD/HD.

Stating directions clearly, having the child repeat them out loud, having the child utter them softly to themselves while following through on the instruction, and displaying sets of rules or rule–prompts (e.g., stop signs; big eyes, big ears for "stop, look, and listen" reminders) prominently throughout the classroom are essential to proper management of AD/HD students. Relying on the child's recollection of the rules as well as upon purely verbal reminders is often ineffective.





2. Consequences used to manage the behaviour of AD/HD students must be delivered swiftly and more immediately than is needed for students without AD/HD.

Delays in consequences greatly degrade their efficacy for AD/HD students. The timing and strategic application of consequences with students with AD/HD must be more systematic and is far more crucial to their management than in normal students. This is not just true for rewards, but is especially so for punishment, which can be kept mild and still effective by delivering it as quickly after the misbehaviour as possible—Swift, not harsh, justice is the essence of effective punishment.

3. Consequences must be delivered more frequently, not just more immediately, to students with AD/HD in view of their motivational deficits.

Behavioural tracking, or the ongoing adherence to rules after the rule has been stated and compliance initiated, appears to be problematic for students with AD/HD. Frequent feedback or consequences for rule adherence seem helpful in maintaining appropriate degrees of tracking to rules over time.

4. The type of consequences used with students with AD/HD must often be of a higher magnitude, or more powerful, than that needed to manage the behaviour of other students.

The relative insensitivity of them to response consequences dictates that those chosen for inclusion in a behaviour management program must have sufficient reinforcement value or magnitude to motivate students with AD/HD to perform the desired behaviours. Suffice to say, then, that mere occasional praise or reprimands are simply not enough to effectively manage students with AD/HD.

5. An appropriate and often richer degree of incentives must be provided within a setting or task to reinforce appropriate behaviour before punishment can be implemented.

This means that punishment must remain within a relative balance with rewards or it is unlikely to succeed. It is therefore imperative that powerful reinforcement programs be







established first and instituted over 1 to 2 weeks before implementing punishment in order for the punishment, sparingly used, to be maximally effective. Often students with AD/HD will not improve with the use of response cost or time out if the availability of reinforcement is low in the classroom, and hence removal from it is unlikely to be punitive. "Positives before negatives" is the order of the day for students with AD/HD. When punishment fails, this is the first area which clinicians, consultants, or educators should explore for problems before instituting higher magnitude or more frequent punishment programs.

6. Those reinforcers or particular rewards that are employed must be changed or rotated more frequently for AD/HD students than for those without AD/HD, given the penchant of the former for more rapid habituation or satiation to response consequences, apparently rewards in particular.

This means that even though a particular reinforcer seems to be effective for the moment in motivating child compliance, it is likely that it will lose its reinforcement value more rapidly than normal over time. Reward menus in classes, such as those used to back up token systems, must therefore be changed periodically, say every

2 to 3 weeks, to maintain the power or efficacy of the program in motivating appropriate child behaviour. Failure to do so is likely to result in the loss of power of the reward program and the premature abandonment of token technologies based on the false assumption that they simply will not work any longer. Token systems can be maintained over an entire school year with minimal loss of power in the program provided that the reinforcers are changed frequently to accommodate to this problem of habituation. Such rewards can be returned later to the program once they have been set aside for a while, often with the result that their reinforcement value appears to have been improved by their absence or unavailability.

7. Anticipation is the key with AD/HD students.

This means that teachers must be more mindful of planning ahead in managing students with this disorder, particularly during phases of transition across activities or classes, to insure that the students are cognizant of the shift in rules (and consequences) that is about to occur. It is useful for teachers to take a moment to prompt a child to recall the rules of conduct in the







upcoming situation, repeat them orally, and recall what the rewards and punishments will be in the impending situation *before* entering that activity or situation. *Think aloud, think ahead* is the important message to educators here. As noted later, by themselves such cognitive self–instructions are unlikely to be of lasting benefit, but when combined with contingency management procedures, they can be of considerable aid to the classroom management of AD/HD students.

8. Students with AD/HD must be held more publicly accountable for their behaviour and goal attainment than other students.

The weaknesses in executive functioning associated with AD/HD result in a child whose behaviour is less regulated by internal information (mental representations) and less monitored via self-awareness than is the case in normal students. Addressing such weaknesses requires that the AD/HD child be provided with more external cues about performance demands at key "points of performance" in school, be monitored more closely by teachers, and be provided with consequences more often across the school day for behavioural control and goal attainment than would be the case with other students.

9. Behavioural interventions, while successful, only work while they are being implemented and, even then, require continued monitoring and modification over time for maximal effectiveness.

One common scenario is that a student responds initially to a well-tailored program, but then over time, the response deteriorates; in other cases, a behavioural program may fail to modify the behaviour at all. This does not mean behavioural programs do not work. Instead, such difficulties signal that the program needs to be modified. It is likely that one of a number of common problems (e.g., rewards lost their value, program not implemented consistently, program not based on a functional analysis of the factors related to the problem behaviour) occurred.





Teaching arrangements

The educational needs of AD/HD pupils are best met with good teaching and classroom management techniques that have relevance to all pupils. Pupils with AD/HD pose particular challenges to their teachers. Teachers will need to adapt the learning environment and their teaching styles to compensate for regular distractions, limited organisational skills and low tolerance of frustration in pupils within their class with AD/HD.

Physical arrangements

- a) Seat student in close proximity to teacher
- b) Seat peer models with good study skills next to students showing attentional difficulties and over activity
- c) Locate the student's desk away from the doorway and windows to minimise auditory and visual distractions. When appropriate, place a physical divide between the child's desk and others to reduce visual distractions
- d) Use seats in rows, a horseshoe or a single desk at the edge of the room for the student when tasks do not require interpersonal contact to minimise the distractions of other students
- e) Reduce the visual distractions in the area of the room for the student
- f) Stand near the student when giving directions or instructions or presenting the lesson. Use visual aids wherever possible e.g. use his/her worksheet as the example when giving instructions

General classroom organisation

- a) Create an organised learning environment establish and demonstrate a regular classroom/lesson routine, particularly for beginnings, endings and transitions
- b) Be clear and consistent about when pupil movement is permitted and when it is discouraged
- c) Use a visual signal to indicate special periods of intense independent work
- d) Teach students how to organise their work, including page layout and organisation of folders. Allow time each lesson for this
- e) Differentiate tasks so they are appropriate for the pupils' abilities





- f) Divide longer assignments into manageable sections, with clear guidelines, expectations and time scales for each section
- g) Provide clear 'due dates' for the completion of assignments
- h) Ensure homework tasks are clearly written in the child's contact book do not assume that the child has written the tasks clearly
- i) Develop a clear system for keeping track of completed and uncompleted work

Lesson presentation

- a) Provide an outline and key concepts to the lesson
- b) Make explicit the relevant prior learning from previous lessons
- c) Differentiate tasks as needed to accommodation the student's attention span as well as ability level
- d) Use visual and/or auditory cues as signals prior to changing a task.
- e) Break the lesson up into segments
- f) Include a variety of activities during each lesson to capture attention
- g) Plan for opportunities for the student to make frequent responses during the lesson
- h) Where possible use multi-sensory techniques for presentation auditory, visual, tactile, role play etc
- i) When giving instructions:
 - a. Make eye contact with the student
 - b. Actively involve the student during the lesson presentation
 - c. Use positive direction explain exactly what is wanted
 - d. Keep instructions short
 - e. Simplify complex directions in component parts
 - f. Write tasks on the board as well as announcing orally
 - g. Discuss learning objectives with the student
 - h. Actively involve the child in goat setting
 - i. Repeat directions
 - j. Check that the student has heard and understands the instructions by asking them to repeat back task directions
 - k. Offer individual assistance





Strategies to address specific behaviour issues

Inattention

- a) Make the individual child's personal lesson objectives explicit to them. Provide rewards that have been negotiated with the child as soon after the targets have been achieved as possible
- b) Seat the student away from distracting stimuli
- c) Gear tasks to attention span
- d) Make the learning objectives explicit
- e) Highlight the component parts of a longer assignment and assist pupil in setting short-term targets
- f) Include a variety of activities in each lesson
- g) Pay careful attention to the design of worksheets keep page format simple and avoid extraneous pictures or visual distractions that are not related directly to the task, have white space on each page, avoid hand-written text, use large type-print and a clear font
- h) Provide alternative environments with fewer distractions for taking tests

Excessive motor activity

- a) Ensure the pupil has an active task within the lesson e.g. giving out books or writing keywords on the board
- b) Provide short breaks between tasks and then re-focus attention back to the work
- c) Remind pupil to check work if performance is rushed or careless
- d) Plan for transitions between learning environments, establish explicit rules and supervise closely

Poor organisation and planning

- a) Break down long assignments into component parts assist pupil in settling shortterm targets for longer assignments
- b) Make the criteria for success explicit for each assignment provide a checklist
- c) Prioritise activities for the student make explicit the criteria influencing the level of priority





- d) Ensure the student is able to use a diary/calendar or other planning system to promote time management for scheduling homework assignments
- e) Persuade parents to use organiser trays at home with days of the week marked, so books and work for school can be put together
- f) Supervise the recording of homework tasks

Impulsiveness

- a) Ignore minor inappropriate behaviour
- b) Increase immediate rewards for good behaviour
- c) Seat pupil near a good role model
- d) Teach verbal mediation skills to reduce impulsive behaviour practise a structured routine of stop, listen/look, think, answer/do

Non-compliance

- a) Use positive direction to tell the student what to do, not what you don't want.
- b) Avoid personalising the problem focus on the behaviour
- c) Negotiate the rules as much as possible, ensure they are simple and clear, review them frequently
- d) Give the student frequent opportunities to be rewarded
- e) Monitor student performance and behaviour frequently and provide frequent feedback
- f) Ensure there are pre-established consequences of behaviour which are explicit and enforce rules in a consistent manner

Difficulties with peers

- a) Organise social skills training to teach concepts of communication, participation and co-operation
- b) Define the desired social behaviour target and implement a reward programme
- c) Praise pupil frequently to raise his/her esteem within the class
- d) Assign special responsibilities to pupil in the presence of peer group so others observe pupil in a positive light





Low self-esteem

- a) Focus on pupil's talents, skills and accomplishments
- b) Praise effort as well as achievement
- c) Notice and reward positive behaviour
- d) Reinforce frequently when signs of frustration are noticed

Dealing with oppositional defiant disorder

Oppositional Defiant Disorder is term given to describe when a child/adolescent displays a certain pattern of behaviours that includes losing their temper frequently, defying adults, being easily annoyed and deliberately annoying others.

The key elements displayed by students with ODD include the following characteristics:

Argues with teachers

Refuses and Defies

Angry and Defensive

Spiteful and Vindictive

Students with AD/HD are often very challenging individuals however some key tips are as follows:

- 1. Have clear expectations of academic and behaviour targets and agreed rewards and consequences
- 2. Make sure they are clear that they are responsible for their actions no matter "that she started it", "I'm tired" etc...
- 3. Be consistent in your approach and handle disruptions with a response that includes no emotion and not too much talking. Consider non aggressive body language and offer the child an escape hatch to calm down
- 4. Catch them doing it right. Praise to correction of behaviour in a 4:1 ratio
- 5. Sometimes look for the draw. Very Defiant students are into power. Let them save face by providing them with 2 options where either one is ok with you





- 6. Know that your job is to set boundaries but the child/adolescent's job is to test them but that discipline means being prepared to make unpopular decisions
- 7. Use assertiveness as opposed to aggressiveness but eliminate sarcasm and other forms of put downs
- 8. Don't ask "Why?" ask "What?" "What should you be doing now?" and use either/Or and
- 9. When/Then "Lewis either put the phone in your bag or on my desk" "Sheena when you have put the chair back under the table then you can go" If it's not working in class get to know them better. "Everybody has a price" and "everybody listens to someone" find out what motivates them and who has influence with them
- 10. It's not behaviour management it's mood management, their mood, your mood and the mood of the others. Analyse your own mood and don't take it personally it is not about you it is about them.

Workplace Strategies for VET students

Introduction

Initiatives, speed, and organization -- they are all things employers are looking for in employees and VET trainees. However for a trainee with AD/HD, it seems a big challenge to meet those demands. Questions that should be considered are:

- a) What limitations is the employee experiencing?
- b) How do these limitations affect the employee and the employee's job performance?
- c) What specific job tasks are problematic as a result of these limitations?
- d) What accommodations are available to reduce or eliminate these problems?
- e) Are all possible resources being used to determine possible accommodations?
- f) Has the VET trainee been consulted regarding possible accommodations? Once accommodations are in place, would it be useful to meet with the employee to evaluate the effectiveness of the accommodations and to determine whether additional accommodations are needed?
- g) Do supervisory personnel and employees need training regarding job coaches?





Tips for job coaches/mentors/tutors

This is a list of accommodations that can be used in the workplace to address some AD/HD impairments of VET trainees. It can be used as a reference for VET-students with AD/HD and employers, however for a more thorough list of potential accommodations and strategies that address

Difficulties with Attention Regulation

- a) Address difficult tasks during the time of day when most alert.
- b) Reminder (visual or auditory) to draw person back "to task".
- c) Use of a timer to define periods of concentration on a specific task.
- d) Mundane and boring tasks rotated with stimulating tasks.
- e) Use of *intrusive* reminders (that are difficult to ignore and require attention to deactivate) for meeting and appointments.
- f) Note taking for lengthy instructions.
- g) Use of audio recorder during meetings.
- h) Distribute tasks amongst employees with consideration of job requirements as well as individual strengths and interests (for example, delegate some of the more menial tasks to an employee who prefers detail orientation work).
- i) Limit continuous e-mail checking unless required.
- j) Scheduled blocks of uninterrupted time during the day where the phone is set on do not disturb and e-mail notifications are blocked
- k) Manager/co-workers to provide a 5 to 10 minute warning when switching of focus required.
- 1) When possible, plan ahead the time and resources for work to be reviewed for details with managers or co-worker.
- m) Intrusive thoughts or ideas written down so they do not intrude on attention to task.

Distractibility

- a) Flex-time to facilitate some less-distracting time at work for example, beginning work an hour early.
- b) Working at home part-time reports and detail work may be easier to compete while uninterrupted at home.





- c) Noise cancelling headsets or white noise machines.
- d) Use of private offices or conference rooms for highly focused work.
- e) Closing office doors.
- f) Use of sound absorption panels.
- g) Moving office or cubicle to lower-traffic areas.
- h) Moving inboxes outside of desk space.
- i) Asking employees to wear headsets when on the phone to minimize noise.
- j) Use of space enclosures (cubicle walls) or face desk away from the line of traffic.
- k) Make your offices available for employees who want to bring in their own professional organizer for de-cluttering or reconfiguring their work environment to minimize visual distractions and development organizational systems.

Impulsivity

- a) Development of standard statements to fall back on when asked to commit to projects
 "That sounds very interesting, but I need to check my schedule": meaning: I need to discuss it with my supervisor and review what I am already committed to.
- b) Note taking of thoughts and potential points to avoid interrupting or off-topic comments during meetings: this will delay the thought process and allow for reflection.
- c) Partnership with a co-worker or supervisor to plan and organize larger projects: creation of a time line and list of duties allows for continued reference.
- d) Implement accommodations and strategies to increase job performance and satisfaction and allow time for constructive discussion of dissatisfaction this will increase job satisfaction and discourage impulsive quitting of jobs.

Hyperactivity

- a) Tasks that encourage movement breaks walking to meetings, picking up mail, getting coffee, walking to a co-workers desk rather than picking up the phone, using the stairs rather than the elevator.
- b) Built in structured breaks that allow for movement.
- c) Exercise during lunch.
- d) Taking notes during meetings.





- e) Use of fidget toys or stress balls for intentional fidgeting.
- f) Private workspace where employee will not disturb others by tapping, humming, or fidgeting.
- g) Working from home.

Time Management Impairments

- a) Alerts (not easy to ignore or switch off when hyper focusing) prompting disengagement of focus to leave for appointments and meetings.
- b) Divide larger assignments into more manageable tasks with staggered deadlines.
- c) Use of electronic organizers.
- d) Timelines and schedules developed and reviewed with team, co-worker or supervisor.
- e) Use of large wall calendar with due dates and time lines.
- f) Under rather than over scheduling.
- g) Temptation to cram in one more activity discouraged.
- h) Provide flexibility in hours and breaks, for example early arrival could mean additional time for breaks throughout the day, etc.

Organization difficulties

- a) Colour-coded systems for files and projects.
- b) List of daily, weekly and monthly routine tasks.
- c) Use of "to do" lists that can be checked off.
- d) Promote teamwork amongst co-workers, including planning meetings for projects.
- e) Supervision with prioritization of tasks scheduled bi-weekly meetings.
- f) Assign new project only when previous project is complete, when possible.
- g) Limited number of projects worked on at one time.
- h) Gantt or flow-charts on times lines for larger projects especially useful for team projects.
- i) Additional orientation or training may be helpful for employees juggling multiple or repetitive tasks.
- j) Paperwork is often impairing minimize, streamline, automate, colour code, dictate or delegate paperwork whenever possible.





- k) Remove the stigma and shame associated with accommodation requests by promoting a collaborative and supportive workplace and management style.
- 1) Working from home.

Forgetfulness

- a) Take immediate action on tasks or immediately log tasks on calendar or note pad.
- b) Check agenda at routine times a day.
- c) All messages written in a binder and checked at scheduled times of the day.
- d) Use or timers, alerts or beepers.
- e) Follow-up of meetings or verbal instructions with an e-mail or hard copy.
- f) Allow employees to use charts or cheat sheets for tasks and instructions.
- g) Suggest the use of an agenda or phone calendar rather than the use of scrap or post-its.
- h) Promote an environment of teamwork where employees feel that they can ask one another questions when unsure of something.

Procrastination

- a) Assign tasks suited to immediate response.
- b) Closer supervision biweekly scheduled meeting with supervisor to check on progress.
- c) Balance workload and type of work for example, set up a schedule where you take a break after 30 minutes of menial work to get up and stretch for 5 minutes, or balance a menial task with creative work throughout the day.

Emotional Dysregulation and difficult relationships with co-workers

- a) Feedback from a trusted supervisor, co-worker, or friend to build awareness of interrupting, bluntness and other issues with social skills VET trainees with AD/HD may be unaware of how they are perceived by co-workers.
- b) Provide awareness and education to all employees regarding effective communication strategies among colleagues.
- c) Assist employee to understand situations as other than black and white.
- *d)* Breaks to cool down from anger or feeling overwhelmed removal from the situation by going for *a* walk, coffee or lunch break, or working from home for a day or two.







- e) Preparation for formal meeting with a review of performance or criticism.
- f) Optional attendance at social activities.
- g) Encourage all employees to model appropriate social skills.
- h) Supervisory method to better fit the employee's needs.

Potential supports for people with AD/HD to seek independently

- a) Use a professional organizer to assist with desk and workplace environment.
- b) AD/HD Coach to assist with organizational strategies.
- c) AD/HD Coach to teach social skills and how to pick up social cues.







ANNEX - DEVELOPING POLICY FOR INCLUSIVE EDUCATION AND STUDENTS WITH DIFFERENT LEARNING NEEDS

The School System

The school system consist of three parts:

Structure

Behavioural systems

Peer / staff relations

Structure

For children with ADHD, structure is one of the most challenging words they will encounter, it smacks of routine and boredom. Yet, the truth is, like all children, they need and will respond well to it, provided the right systems are in place. The trick is how to sell it to them. Structure can only be achieved through consistent application of systems. A regular, unchanging timetable of lessons from Monday to Friday is ideal. Alternatives, such as six-day or two-week timetables, are more difficult for children with ADHD to manage, though can work as long as the system is not altered once they are used to it. The worst scenario is where there are the most variables; different lessons on different days in different rooms with different teachers. Children with ADHD benefit greatly from familiarity and the more structured and regular the timetable, the better.

Behavioural systems

Alongside school structure, behavioural systems are necessary, which reflect positive and negative performance. Tokens, stickers, star charts and certificates are just a few examples of these. Students with ADHD must have immediate consequences to their behaviour. They are unlikely to be motivated by long-term targets which are available to all, such as earning a good end-of-term report. Immediate, consistent, tangible rewards such as those mentioned are vital for any behavioural system to work. The typical student with ADHD lives in the present, finding it hard to look at the future and having no real relationship with the past. Once the







moment is past, it is literally history; one reason why students with ADHD find it so difficult to accept responsibility for their actions.

Motivators can be hard to find for some students, yet most will work towards something. Involving them in decision-making about what rewards they would like to receive is one way of trying to ensure this happens. Activity-based rewards will also differ according to age, ranging from extra computer or playtime for the younger student to off-site privileges for older students. Wherever possible, parents should be encouraged to take responsibility for out-of-school reward activities, as not only does this enable them to feel part of the process, but also creates the opportunity to share a positive experience with their student.

Negative reinforces should only be used as part of a clear, staged process, or intervention ladder, following tactical, planned ignoring. The first stage might be a simple, non-verbal response, such as a stare, with moving the student away from the group and 'time out' coming further up the ladder, and each intervention only being implemented after the previous stage has failed.

Rules are also an important component of any behavioural system. Again they serve to provide structure and predictability, which a student with ADHD needs. School rules should be simple and no more than about five in total, differentiated into no more than three individual rules for the student with ADHD, which could be laminated on card and made easily portable, thereby serving as a visual and tangible reminder.

Peer/staff relations

Schools have a significant role to play in developing children's social skills. For many, a core enjoyment factor of attending school is seeing their friends. Major problems are therefore likely to arise if they have difficulty making and sustaining friendships with other children.

A number of issues make inclusion into friendship groups difficult for children with ADHD. Their inability to read the signals and cues of successful communication, cues that most of us take for granted, is a key factor, not to mention their lack of control, or regulation, over their spontaneous and impulsive behaviours. Initially a child with ADHD can be attractive to a group due to the unusual and amusing behaviour often displayed. Yet the 'class clown' routine has a limited lifespan, other children quickly losing patience with the constant interruptions to group activity and conversation. This can lead to children with ADHD feeling





isolated. Social experience is often no better outside of school. Many children with ADHD may have been excluded from social gatherings with other children from the age of two and sibling relationships are often also poor.

While break times and lunchtimes can provide very enjoyable experiences for children with ADHD due to the opportunity for a high level of physical activity, they are also potential trouble spots as far as social interaction is concerned. Structure, once again, is central here.

Children with ADHD can be supported in their relations with other children in a variety of ways:

- an older child 'buddy' to act as a positive role model
- providing opportunities for them to help/play with younger children, if that is where they fit in
- explicit teaching of key social skills
- making a range of activities available during break times and lunchtimes, backed up by effective staff supervision and support
- encouraging participation in extra-curricular activities with a social element

It is vital that a child with ADHD is able to identify and have a positive relationship with at least one member of staff. The identified person should essentially act as an advocate or mentor and have a key role both in assessing and addressing the child's academic and social needs. Co-ordinating, monitoring and ensuring a consistent approach with all those who come into contact with the child is of paramount importance here.

Step 1

Implementing change and introducing policies or practices involves a preparatory period for collecting information, raising awareness, and developing commitment to the process. Schools need time to assess and understand the many issues that change can involve. Therefore, they should identify the individual factors that relate to inclusion and develop a timeframe that suits them for completing the full cycle. This means reviewing current policies and administrative systems. This phase may involve:

✓ Enabling staff to explore and become familiar with the Inclusive Education Framework and self-reflection templates.







- ✓ Taking feedback, questions and queries from staff.
- Nominating people to a core team, drawn from the whole-school community, including the board of management and principal, to oversee the process. They will take careful account of school dynamics and put forward strategic proposals about managing change in the school. The size of the core team will depend on the school's size and the issues to be addressed. It is recommended, however, that the core team should include the principal and representation from teaching staff (class, learning support and resource teachers), parents, SNAs, administrative and ancillary staff and board of management.
- ✓ From this core team, sub teams may address certain themes. Staff, other than those on the core team, and pupils with special educational needs may be co-opted to these sub teams as appropriate. It is important to capture the experience of the pupil with special educational needs in this process. This can be done by including the pupil's parent or the pupil themselves, as appropriate.
- ✓ Evaluating current approaches to school planning and development.
- ✓ Developing a timeframe for completing the Inclusive Education Framework cycle.
- ✓ Prioritising the order in which the themes will be worked through. This could be done through discussion and reflection on the urgency or importance attached to each theme or it could be linked to priorities already identified through the school development planning process. It should be noted that the themes are interlinked and so schools should engage with and complete all ten themes over the three-year cycle.

Procedure:

Individual Reflection: (10 minutes)

Each staff member is asked to identify 2 core values to be included in the policy (vision and mission) statement (See Core Activity 2 Worksheet)

Plenary Session: (20minutes)

Feedback from each member of staff is recorded on a flip-chart

FOLLOW-UP:

At the end of Activity 2 arrangements are made to advance the development of the policy statement:





- i. A committee is established to draw up a draft policy statement
- ii. The committee studies the feedback and notes the key values emerging and prepares a draft policy statement based on these values
- iii. The committee circulates the draft policy statement to the individual members of staff for their views
- iv. The committee revises the draft statement in light of the staff responses and presents it to the whole staff at a meeting
- v. The committee draws up of a draft statement as a basis for consultation with school partners
- vi. Consultation with school partners takes place
- vii. Redrafting occurs in the light of the responses received, followed by further consultation and redrafting if necessary
- viii. Consensus is achieved, leading to ownership of the policy statement by the school community
 - ix. Steps are devised to ensure that the policy is delivered in action
 - x. A time-frame for the future review of the policy statement is established

WORKSHEET 1

Questionnaire to Identify Core Values with regards to students with different learning needs including AD/HD

Please identify and record **2 values** you would wish to be included in the policy statement with regards to students with different learning needs.

In choosing your 2 core values you might consider questions such as:

- a. What motivated you to become a teacher?
- b. What are the key qualities you wish to encourage in your students with different learning needs?





- c. What are the main educational principles that guide the daily life of the school regarding students with different learning needs including those who have AD/HD diagnosis?
- d. Could you name three things that the school values highly in students with different learning needs including those who have AD/HD diagnosis?
- e. Could you name three things that the school values highly in teachers?
- f. Could you name three things of which your school is most proud and say what values are implied in them regarding students with different learning needs including those who have AD/HD diagnosis?
- g. What symbols and signs do you see in the school that represent important school values with different learning needs including those who have AD/HD diagnosis?
- h. Would you send your children to this school if he/she had an AD/HD diagnosis? Please explain why or why not

At the end of the process, when all 14 themes and sub themes have a qualitative measure, the school can determine an overall inclusion qualitative measurement. An example of how this might look is provided in figure below:

	T
Getting started	Individualised Education Planning
	Support for and Recognition of
	Learning (a) Informal and Formal
	Assessment
Some progress made	Whole-School Development
	Planning
	Whole-School Environment
	Communication
	Curriculum Planning for Inclusion
	Teaching and Learning Strategies (a)
	The Learning Experience and (b)
	The Teaching Experience
Good progress made	Leadership and Management
	Classroom Management (a)





	Classroom Protocols and Rules and
	(b) Curriculum Implementation
	Support for and Recognition of
	Learning
Good practice in place	Pupil and Staff Well-being (a)
	Fulfilling Pupil Potential and (b)
	Fulfilling Staff Potential

Step 2

DEVELOPING A POLICY STATEMENT - NEEDS AND VALUES INFORMATION SHEET

The school could immediately address those areas it considers high priority and/ or those areas where it is at the initial stages of development ("no start made", "getting started"). Specific actions that can be effected without significant planning may also emerge from the assessment. A school might decide to prioritise a theme for further action or development, despite having made good progress because the school considers it a high priority. Finally, a fixed schedule to review progress should be agreed. Clearly the implementation of some actions may be long term and may fall outside the three-year cycle and this should be noted when drawing up action plans.

Some questions that teams should consider in developing action plans are:

- 1. What actions do we propose to take to address the priorities identified?
- 2. What strategies should we adopt for the development of more inclusive practices for this theme?
- 3. What specific resources will we need to implement our proposed actions?
- 4. Who will be involved in planning, implementing and monitoring the actions?
- 5. Who will have lead responsibility?
- 6. What timeframes will we set for the implementation of the actions?





- 7. What arrangements will be made for monitoring our progress and evaluating the impact of our actions?
- 8. What feedback, discussion or professional development opportunities will be scheduled to promote inclusion in this area?
- 9. What other supports could we provide to develop this area?
- 10. What resources, approaches or training are needed to overcome the barriers to inclusion that have been identified for this theme?

Activities

This activity explores the **needs** of students with different learning needs (AD/HD) among staff, parents, the local community and society and also the **values** that the school seeks to develop in the whole school community with regards to those needs.

Note: For this activity it is recommended that a school authority representative is present.

Procedure:

Staff are broken into groups according to the following criteria:

Group 1: To include Principal and Deputy Principal

Group 2: To include school authority representative

Group 3: To include staff members who are on the Board of Management

Group 4: To include staff members who are parents

Group Discussion: (25 minutes)

Each group is asked to discuss the following questions:

Group 1: I am the Principal/Deputy Principal.

List one or two things I expect for **myself** from the school community.

List one or two things I want for **this** school community.

Group 2: I am a school authority representative

List one or two things I expect for myself from the school community

List one or two things I wish for **this** school

Group 3: I am a Staff Member of the Board of school Management







List one or two things I expect for **myself** from the school community

List one or two things I expect for **our students** from the school community

Group 4: I am a Parent

List one or two things I expect for **myself** from the school community

List one or two things I want for **my children** from the school community

(Note: This Activity can be extended to include further groups to represent, for example, Teaching Staff, Support Staff, Students, Past-Students, and so on)

Plenary Session 1: (20minutes)

Feedback from the different groups is reported and noted on flip-chart

Individual Reflection: (10minutes)

Staff members are asked to reflect individually on the feedback from the groups and then to choose 2 words that they believe should be included in policy Statement

Plenary Session 2:

Individual responses are called out and are recorded on flip-chart pages that are displayed around the room

FOLLOW-UP:

At the end of Activity 3 arrangements are made to advance the development of the policy statement with regards to students with AD/HD diagnosis:

- i. A committee is established to draw up a draft policy statement
- ii. The committee studies the feedback and notes the key values emerging and prepares a draft policy statement based on these values
- iii. The committee circulates the draft policy statement to the individual members of staff for their views
- iv. The committee revises the draft statement in light of the staff responses and presents it to the whole staff at a meeting







- v. The committee draws up of a draft statement as a basis for consultation with school partners
- vi. Consultation with school partners takes place
- vii. Redrafting occurs in the light of the responses received, followed by further consultation and redrafting if necessary
- viii. Consensus is achieved, leading to ownership of the policy statement by the school community
 - ix. Steps are devised to ensure that the policy is delivered in action
 - x. A time-frame for the future review of the policy statement is established

VALUES IDENTIFICATION AND CLARIFICATION

INFORMATION SHEET

Instrument: Identifying and Prioritising Fundamental Values with regards to needs of students with different learning needs (AD/HD) (Activity 4 Worksheet)

Procedure:

Individual Reflection: (10minutes)

Staff members are asked to reflect on the values that they think are important for the school and to prioritise 2 values

Group Discussion No. 1: (20 minutes)

Staff are broken into groups to discuss individual responses Each group prioritises 3 fundamental values

Plenary Session 1: (20minutes)

Prioritised values are presented by a member of each group and recorded on a flip-chart Staff are asked by facilitator to describe different values in action

Group Discussion No. 2: (15 minutes)

Staff are again divided into groups to identify how the values identified could be reinforced





Plenary Session 2: (20minutes)

The responses are presented by a member of each group The responses are recorded on a flip-chart

WORKSHEET -Values Identification and Prioritisation

Please identify 2 values that you think are important for the school with regards to students with different learning needs (AD/HD):

1.				
2				

In choosing your 2 values, you might reflect on the values inherent in the school's approach to the following areas:

- i. Personal Development
- ii. Social Development
- iii. Academic Achievement
- iv. Discipline
- v. School Administration and Organisation
- vi. Extra-Curricular and Co-Curricular Activities
- vii. Religious Formation and Ritual
- viii. Home-School-Community Links

Step 3

Reviewing the Policy Statement

This phase involves reviewing progress made in implementing the actions agreed. Schools may use the action and improvement plan section of the template for this. This involves:

- ✓ Reviewing the progress made
- ✓ Discussing what worked well, acknowledging successful steps and identifying and documenting any additional progress made beyond actions agreed





- ✓ Identifying any further development required
- ✓ The completion of the cycle informs the start of the next cycle in which long-term actions are included.

Reviewing the policy statement involves determining the relevance and validity of the existing policy statement with regards to students with different learning needs.

Question to be considered:

- i. What aspects of the policy are still relevant?
- ii. In the light of the changing needs of today's society, what needs to be renewed in, added to, or omitted from the policy statement?
- iii. How is the policy being lived in the school community?
- iv. How do school policies and documentation reflect the policy (mission and vision)?
- v. How does the curriculum reflect the values of the policy?
- vi. How does the management of the school reflect the values and beliefs expressed in the policy statement with regards to students with different learning needs?
- vii. How do relationships within the school and between the various parties in the school community reflect the policy statement with regards to students with different learning needs?
- viii. How does the school's policy reflect the needs of a complex multicultural society?

The Review can be done through a simple survey inviting the community to respond to the policy statement. The previous questions could provide a starting point for exploring the school community's perceptions of the current statement and identifying aspects that are in need of development.

Reviewing a Policy Statement:

Activities and Sample Worksheets





This section presents a selection of **Activities** and sample **Worksheets** that may be helpful to schools in organizing the process of Exploring and Reviewing a policy Statement in Action for students with different learning needs.

ACTIVITY - EXPLORING POLICY IN ACTION INFORMATION SHEET

Instruments:

Exploring the Area of Home-School-Community Links with regards to students with different learning needs-

Documentation in the School:

Policy Statements with regards to student with different learning needs on areas such as:

- ✓ Enrolment
- ✓ Pastoral care
- ✓ Discipline
- ✓ Curriculum
- ✓ Special needs
- ✓ Professional development
- ✓ Computer education
- ✓ Homework

Other Documents such as:

- ✓ Staff handbook
- ✓ Reporting formats
- ✓ Prospectus
- ✓ Newsletter
- ✓ School magazine

These lists are not exhaustive

Procedure:

Group Discussion:

i. Staff members are divided into groups to examine documentation relevant to the whole school community and to each individual area to see if it reflects the values and beliefs expressed in the Policy Statement. (Each group is assigned one of the 4 areas listed above under **Instruments**)





- ii. Groups identify concrete evidence of the values expressed in the policy Statement in the major policy documents of the school
- iii. Groups identify any discrepancies between the values expressed in the policy Statement and the values implied in other school documentation
- iv. Each group considers the operation of the school's policy in the area of school life assigned to it. The group reflects on the questions on the relevant worksheet and prepares agreed group responses, highlighting:
 - a. Aspects of the policy Statement that are not reflected in the life of the school with regards to students with different learning needs
 - b. Aspects of the policy Statement that require amendment or development in the light of changing needs with regards to students with different learning needs

Plenary Session:

- ✓ Feedback from the groups is reported
- ✓ Key areas of concern in relation to (a) policy Statement (b) School Policies and (c) School Practices are identified and prioritised

FOLLOW UP:

At the end of Activity 5, arrangements are made to address the areas of concern that have been prioritised. These arrangements may include the establishment of Task Groups.

Exploring the Area of the Home-School-Community Links

Key question:

Do the school's values and beliefs encourage an **effective relationship** between the school and the **school community**?

Explore:

What evidence is there that the school interacts effectively with?

- ✓ Home
- ✓ Local Community
- ✓ Other agencies





WORKSHEET -

Scal	Scale 5=Excellent 1=Very Unsatisfactory Avoid over-use of 3					
Effe	Effectiveness indicators			3	2	1
1	There is good leadership in the school regarding students with different learning needs (AD/HD).					
2	There is a good understanding and a collective ownership of the school's basic goals regarding students with different learning needs (AD/HD).					
3	Generally, decision-making and policy formulation on important matters try to follow principles regarding students with different learning needs (AD/HD).					
4	Policies on important practices and procedures are well developed and there is a coherent approach in their implementation regarding students with different learning needs (AD/HD).					
5	Role definitions within staff are clear and are known regarding students with different learning needs (AD/HD). There is a good level of shared responsibility in the general running of the school.					
6	Between management and staff and among the staff generally there is a good level of trust and openness discussing students with different learning needs					
7	There are clear and effective means of communication so that, in general terms, staff are in a position to "know what's going on" regarding students with different learning needs (AD/HD).					
8	A good and inclusive social atmosphere regarding students with different learning needs (AD/HD)					
9	There is a committed and professionally alert teaching staff regarding students with different learning needs (AD/HD).					
10	The school has definite policies to promote the personal and professional development of those in management positions and of teachers regarding students with different learning needs (AD/HD).					
11	There are recognised and positive ways of helping teachers who have difficulty in coping with students with different learning needs (AD/HD).					
12	The school's policy on student discipline and care, especially regarding students with different learning needs, helps to maintain an orderly and relaxed atmosphere conducive to good teaching and good learning.					
13	The school's total curriculum recognises the abilities and needs of all students with different learning needs and affords all students some level of inclusion and affirmation.					



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14	There are high, though realistic, expectations of students with different learning needs in regard to academic achievement.			
	There is good communication with parents and a good level of rapport exists between the school and parents of students with different learning needs			

Examples of school policy

$(Here\ you\ have\ to\ find\ examples\ of\ school\ policy\ in\ your\ country)$

schools is to provide all students, including students with different learning needs, with a high quality education that enables them to be contributing members of a multiethnic, multicultural, pluralistic society. We seek to create an environment that achieves equity for all students and ensures that each student is a successful learner, is fully respected, and learns to respect others.	Cahaal	Vision	Mission
will be the first diverse school system to work with Families and the community to successfully educate all of its students at high levels. Every Student, Every Day We strive for our students to be proficient in all curricular areas. The mission of our schools is to provide all students, including students with a high quality education that enables them to be contributing members of a multiethnic, multicultural, pluralistic society. We seek to create an environment that achieves equity for all students and ensures that each student is a successful learner, is fully respected, and learns to respect others.	70 0	1	10.10
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References

Claesson, S., Hallström, H., Kardemark, W., & Risenfors, S. (2011). Ricoeurs kritiska hermeneutik vid empiriska studier. Pedagogisk Forskning i Sverige. 16(1), s. 18–35.

DuPaul, G.J., Weyandt, L & Janusis, G.M. (2011). ADHD in the classroom: Effective intervention strategies. Theories into Practice, 50, 35-42.

Egelund, Niels m.fl. (2006), Inkluderande pedagogik i skandinaviskt perspektiv, Stockholm: Liber AB.

Farrell, M. (2003). Understanding Special Educational Needs: A Guide for Practitioners. London: Sage/Paul Chapman.

Feingold Association of the United States. (2012). The Feingold Bluebook, Behaviour, Learning, and Health: The Dietary Connection. [PDF version]. Retrieved from: http://www.fgshop.org/bluepdf.aspx

Fejes, A., & Thornberg, R. (2015). Handbok i kvalitativ analys. Stockholm: Liber.

Fernell, E., Kadesjö, B., Nylander, L., & Gillberg, C. (2014). ADHD bör uppmärksammas mer – tidiga insatser spar lidande. Läkartidningen. 2014;39. Hämtat den 10 december 2017.

Gargaro, D.R. (2009). Teachers' attitudes, bias, and perceptions pertaining to students with AD/HD and effects on the teacher/student relationship (Unpublished masters' thesis). University of Wisconsin-Stout, Menomonie, WI.

Gehrman, D.R. (2013). General education teachers' perceptions of students with ADHD and professional development (Unpublished master's thesis). University of Wisconsin-Stout, Menomonie, WI.

Hellberg, K., & Kjellberg, A. (2012). Övergångsprocessen från skola till vidare studier och arbete - Intervjuer med unga vuxna med ADHD och Aspergers syndrom. (Rapport). Linköpings universitet. Norrköping. Hämtat den 10 december 2017.

Hjörne, E. (2012). Det har skett en stor förändring hemma – elevidentitet, föräldrars motstånd och ADHD i den svenska skolan. Utbildning och demokrati, 21(3), s. 91–106

Mossler, K., & Kadesjö, B. (2004). Kort om ADHD hos barn och vuxna. Stockholm: Socialstyrelsen. Hämtat 10 oktober 2017 från www.socialstyrelsen.se.

Ross, P., & Randolph, J. (2014). Differences between Students with and Without ADHD on Task Vigilance under Conditions of Distraction. Journal of Educational Research and Practice, 4(1), s. 1–10.





Skolinspektionen. (2014). Skolsituationen för elever med funktionsnedsättning AD/HD. Kvalitetsgranskning nr. 2014:09. Stockholm: Skolinspektionen

Socialstyrelsen (2004), Kort om ADHD hos barn och vuxna: en sammanfattning av socialstyrelsens kunskapsöversikt.

Internet Resources

http://www.socialstyrelsen.se/Lists/Artikelkatalog/Attachments/10347/2004-110-7_20041107.pdf (juni-juli 2012) ADHD-center, faktablad "Vad är ADHD" av Agneta Hellström mars 2008

 $\underline{http://www.habilitering.nu/gn/opencms/web/HAB/_Subwebbar/adhd_center/Informations material/faktablad.html$

ADHD-center, pojkar och flickor

http://www.habilitering.nu/gn/opencms/web/HAB/_Subwebbar/adhd_center/Om_adhd/pojkar_och_flickor.html (Hämtat 2012-07-12)

ADHD-center, behandling

http://www.habilitering.nu/gn/opencms/web/HAB/ Subwebbar/adhd_center/Om_adhd/stod_och_behandling.html (Hämtat 2012-07-12)

Skolförordningen SFS 2011:185

 $\frac{http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Skolforordning-2011185_sfs-2011-185/?bet=2011:185$ (Hämtat 2012-08-09)

Skollagen 2010:800

 $\frac{http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Skollag-2010800_sfs-2010-800/\#K3 \ (H\"amtat 2012-08-09)$

Svenska Unescoföreningen (2008). Riktlinjer för inkludering – att garantera tillgång till Utbildning för alla.

www.unesco.se/Bazment/Alias/Files/?Inlaga (Hämtat 2012-08-14)

http://lakartidningen.se





GUIDELINES: ASSISTING VET SCHOOL BOARDS IN DELIVERING SPECIAL EDUCATION SERVICES FOR STUDENTS WITH AD/HD

Coordinated by: Ali Rashidi Folkuniversitetet Uppsala, Sweden.

In the context of:

Q4ADHD - Quality Assurance in VET for learners with ADHD

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