Developing augmentative and alternative communication policies in schools



Information and guidelines

editors
Sue Chinner
Gillian Hazell
Paul Skinner
Pat Thomas
Gill Williams



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Published by the ACE Centre Advisory Trust
92 Windmill Road, Headington, Oxford OX3 7DR
Tel: 01865 759800
Fax: 01865 759810
email: info@ace-centre.org.uk
www.ace-centre.org.uk
Registered charity No 1040868

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The ACE Centre Advisory Trust is a registered charity, partly funded by the DfEE via BECTa, and The Gatsby Charitable Foundation. If you would like to know more about the different ways you could support this very special work, please contact us.

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Editors: Sue Chinner, Gillian Hazell, Paul Skinner, Pat Thomas, Gill Williams

Authors:

Sarah Barnett	Speech and language therapist	North London	London
Stephanie Brewster	Speech and language therapist	Selly Oak	Birmingham
Helen Brookes	Speech and language therapist	Maidenhead	Berkshire
Estelle Byrne	Speech and language therapist	Widnes	Cheshire
Sally Chan	Speech and language therapist	Bristol	Avon
Sue Chinner	Deputy Headteacher	Smethwick	Birmingham
Bob Coburn	Headteacher	Bristol	Avon
Celia Dawson	Deputy Headteacher	Maidenhead	Berkshire
Jeanne Eames	Deputy Headteacher	Portsmouth	Hampshire
Marianne Haylett	Teacher	East London	London
Gillian Hazell	Speech and language therapist	Oxford	Oxfordshire
Christine Hopkins	Teacher	Reading	Berkshire
Alison James	Speech and language therapist	Wilmslow	Cheshire
David Leitch	Advisory teacher	Worcester	Hereford
Janet Lesley	Speech and language therapist	Ivybridge	Devon
Sarah Little	Speech and language therapist	Birmingham	West Midlands
Alison MacKenzie	Speech and language therapist	Sheffield	South Yorkshire
Helen Nightingale	Advisory teacher	Leicester	Leicestershire
Val Searle	Speech and language therapist	Wellingborough	Northants
Paul Skinner	Headteacher	Basingstoke	Hampshire
Les Smith	Headteacher	Wingrave	Bucks
Pam Stevenson	Speech and language therapist	Alton	Hampshire
Miriam Thain	Teacher	Belfast	N Ireland
Pat Thomas	Teacher	Westerham	Kent
Gill Williams	Speech and language therapist	Northfield	West Midlands

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Introduction

What is the aim of this document?

This document sets out to define **Augmentative and Alternative Communication** (AAC) and the rationale behind it in the context of educational and legal frameworks. In addition, it offers information and guidelines to local education authorities, schools and health professionals about meeting the highly specialised and individual needs of pupils with AAC requirements. In order to ensure that these needs are met, the document recommends that schools and local education authorities devise AAC policies which reflect the requirements of individual establishments.

What this document does not provide

This document does not set out to provide a detailed policy for schools to adopt for the reasons given at the foot of page 5. It contains no specific recommendations for the implementation of assistive technologies, and it does not address the relationship between literacy and AAC.

Boxed sections (such as this one) relate to key issues which need to be addressed in the development of an AAC policy. **Numbered superscripts** like this^[1] relate to references which may be found in the Bibliography.

There are now more young people using Augmentative and Alternative Communication (AAC) systems in both mainstream and special schools than ever before. Successful inclusion of these pupils in all settings depends on the development of supportive communication environments. The planning and implementation of appropriate programmes involves a wide range of professionals working together.

Children who need augmentative and alternative communication can be classified^[1] into three main groups, depending on the function the augmentative communication will fill:

· Expressive language group

Characterised by a large gap between the understanding of language and expression of spoken language. Their alternative forms of communication may become the preferred means of expression.

· Supportive language group

The augmentative system is intended to function as a 'scaffold' to the development of a normal mastery of speech, and to reduce the negative effects of language disorders.

· Alternative language group

Characterised by both using and understanding little or no speech – these children will need to be taught language through alternative means of communication *and* to be taught to use this means of communication expressively.

Children with Severe Communication Impairments (SCI) need AAC in order to:

develop communication skills (tools for interaction)	develop language skills (tools for learning)
needs and wants	recall
ideas	predict
feelings & opinions	explain
social closeness	hypothesise
self expression	enquire
	imagine

It is through communication that the child has access to education, through shared learning, discussion and exploration.

"Education is a specialised form of communication. Human beings have developed particular times and places in which scripts of their cultures are to be communicated from one generation to the next. We have come to call the set of practices by which this communication of cultural scripts is accomplished 'education'.

The communication that occurs in educational contexts happens in oral, verbal and non-verbal modes ... [our] role is to facilitate communication, thus the education, that occurs in the classroom." (Hoskins 1990)^[2]

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Part 1:

What is meant by the term AAC?

A definition of AAC

Augmentative and Alternative Communication (AAC) refers to any means by which an individual can **supplement** or **replace** spoken communication. Communication may range from any movement or behaviour that is observed and interpreted by another person as meaningful, to the use of a code agreed upon between people where items have specific meanings, ie a language. We all use some form of augmentative communication in our daily life, for example, gesture (waving goodbye) and graphic symbols (washing label symbols, road signs).

AAC is both a means of accessing an educational curriculum and language in its own right. It is appropriate for individuals who have difficulty with receptive and expressive language due to physical, sensory or learning disability. It provides an opportunity to attain emotional, social, educational and vocational goals.

Unaided and aided communication

The school will need to consider the concept and meaning of AAC in order to formulate a policy. AAC can be divided into unaided and aided communication^[3]:

Unaided communication

Unaided communication can be described as communication modes that use only the user's body. These include:

- Body language, eye pointing, facial expression, natural gesture, use of vocalisation/intonation, sensory stimulation
- Sign languages (eg British Sign Language, American Sign Language)
- Signing systems (eg Paget-Gorman Signed Speech, finger spelling)
- Signed vocabularies (eg Sign Supported English, Makaton vocabulary, Signalong)
- Verbal/gestural strategies used to compensate for poor speech (eg cued articulation, cued speech)

Aided communication

Aided communication can be described as communication modes that require equipment in addition to the communicator's body. These include:

- Objects, photographs, pictures, graphic symbols (eg Picture Communication Symbols, Rebus, Blissymbols) or words, which may be organised into charts or books.
- Communication aids which produce speech and/or text, more commomly called VOCAs (Voice Output Communication Aids). VOCAs are dedicated hardware units or portable computers with communication software, and may a digitised voice from voice recordings or a synthesised voice.

Aided communication systems require a reliable method of access:

Direct access may include:

- · Pointing to items
- Eye pointing
- · Use of a keyboard
- · Use of an infra red or light pointer

Indirect access may include:

- Use of scanning with an input device such as a switch.
- Use of a pointer control system such as a joystick or trackerball.
- Use of listener-mediated scanning (in which the communication partner assists the user to make vocabulary selections).

Integration and effectiveness

AAC systems may be integrated with other systems – they may be linked to mobility systems, computers and printers, or they may be able to access environmental control systems.

To be effective, all AAC users will need to be taught to use more than one mode of communication according to their individual needs and abilities. Even an able user of a sophisticated VOCA will also require simple aided and unaided systems. There are also issues of the perceived social status of low and high tech communication systems (eg VOCAs) are often seen as having higher status than a communication chart or book, but in fact both low and high tech systems of communication are essential. For example, a VOCA cannot be used in a swimming pool, but a communication chart on a float can.

Use of a variety of modes of communication, including speech, can be referred to as **total communication**. The child's social and learning environment should facilitate and encourage the use of total communication.

Part 2:

Why do we need AAC policies in schools?

"In this country we are justly proud of the freedom of speech, that we can say what we want. But I think there is an even more basic freedom than the freedom of speech and that is the freedom to speak." (Professor Stephen Hawking)^[5]

The freedom to communicate is a basic equal opportunities human right. As the International Society for Augmentative and Alternative Communication (ISAAC) mission statement ^[6] says, "Communication is the essence of human life". The inability to communicate impacts adversely on social, emotional, cognitive and language development, and well-being.

There is still considerable asymmetry between the input (spoken language) that these children receive in their environments and their output (AAC systems). Awareness of the need of AAC users to see others using their means of expression is essential, even though spoken language is still considered to be more socially acceptable.

The need for an AAC policy

We need AAC policies in schools:

- to provide human rights and equal opportunities.
- to provide means of communication.
- · to develop language skills.
- to ensure access to all potential modalities of language development.
- to ensure there is a community of users.
- to provide models of language and communication.
- to raise the status of the systems.
- to safeguard access to the curriculum.
- · to maintain levels of training.
- to maintain levels of resources.

This document does not provide a detailed policy for schools to adopt because:

- It cannot be sufficiently prescriptive to cover all types of educational establishments.
- Each establishment has it's own particular needs.
- Considerable discussion is required by relevant professionals as part of the development of an AAC policy.

What we know

We already know that:

- AAC systems do not interfere with speech development and may encourage it.
- AAC systems involve modality, specific styles and strategies.
- · AAC systems can provide:
 - a means of communication for people at an early stage of development.
 - a means of communication and language for those whose speech is unintelligible.
 - a bridge to spoken language.
- The implementation of AAC requires interdisciplinary assessment, coordination and monitoring.
- Teachers, classroom staff and therapists can make a difference.
- Schools can make a difference.
- Families can make a difference.

What goes wrong

Many barriers to successful implementation have been identified in a variety of recent research projects.^[7]

Policy barriers

These arise as a result of legislative or regulatory decisions that govern the situations in which AAC users find themselves. Examples of this are:

· Segregation policies

The education of students in places other than those in which the majority of students receive their education.

· Limited use policies

There are many reasons why students have only restricted access to their AAC systems. For example, ownership issues in which equipment becomes the property of the educational authority can result in the loan contract being terminated when the child achieves school leaving age. Other issues include the failure of an educational establishment to implement whole school policies and practice, and the inadequacy of information shared between home, school and residential settings.

Practice barriers

These are procedures or conventions that have become common in a school, for example limited speech therapy input because of lack of funding.

Attitude barriers

These negative and restrictive barriers include low expectations, personal prejudices, feelings of de-skillment, technological phobia, and anxieties reflecting a fear of inhibiting the development of speech through the use of AAC.

Opportunities for the student's participation in AAC activities may be restricted as a consequence of lack of knowledge or training by professionals, restriction on course attendance etc.

What happens as a result

Unintentional negative attitudes towards AAC will inevitably affect its acquisition and use. This means that:

- AAC systems are taught but not used.
- 30% of AAC systems are abandoned.^[8]
- 20% of systems are only used in formal teaching sessions.
- AAC users lose their skills over time. [10][11]
- AAC systems are regarded as second class and therefore having low status. [10]
- AAC systems are taught for a user's perceived needs rather than conversation.
- Interactive partners do not use AAC systems.

Designing AAC policies

When designing AAC policies, schools should:

- assess the quality of the communication opportunities in the child's environment
- identify any existing barriers to successful implementation
- include policies for the provision of resources including seating, access devices, appropriate hardware, software, and symbol systems

A brief policy framework is shown in Appendix 1

What needs to happen

Equality of opportunity

Equality of opportunity is evidenced when staff recognise that *they* are AAC users when in school. This means that:

- Staff should be encouraged to sign.
- Staff should be encouraged to use symbols.
- Symbols are visible in all areas of school.
- Symbols are incorporated into all aspects of the curriculum and not just AAC sessions.
- AAC has a high status in terms of staff training and sharing of expertise.

The child needs to acquire, use and develop his/her language and communication skills across subjects, people and situations throughout, outside and beyond school life (see fig 1 overleaf).



Fig 1: The importance of equal opportunity for integrating the AAC of school and community

Equality of opportunity

AAC policies should aim to provide equality of opportunity for all. This involves appropriate staff organisation, class groupings and the development of individual programmes based on pupil need. Policies should also aim to provide curriculum balance in the amount of time allocated for one-to-one work in a distraction-free environment, and opportunities for interaction with both speaking peers and other AAC users.

Developing successful communication environments

This is the responsibility of everyone. Recent research findings support the notion that the AAC user's contribution is not the product of that person alone. Rather it is the behaviour of both conversational partners which determines the overall success or failure of the AAC user to acquire communication skills.

For many users of both high and low tech systems, considerable time may be taken up in encouraging *communicative intent*. For example, the AAC user is provided with the means to indicate 'more' (through sign, symbols or a VOCA), encouraging and reinforcing the use of this within an activity. The use of a simple AAC system empowers students to take control and restores their capacity to make choices and be active in their own learning. Without access to appropriate methods of AAC, a pupil may remain in the role of a passive receiver.

If pupils perceive that they cannot control their environment there is a risk of developing learned helplessness. Children soon lose interest in a world they cannot control. Numerous studies have indicated that the naturally vibrant motherese evidenced in interactions between the normally developing child and their care givers is not replicated in the day-to-

day social exchanges experienced by youngsters with a communication disorder. Pupils who require access to AAC may also need increased opportunities to develop a social construct of language:

"Children whose instruction is limited to the rote training of symbols, increasing syntactic complexity and vocabulary size should not be expected to subsequently generalize such learning to natural situations requiring communication." (Calculator and Jorgensen 1991)^[12]

At the heart of effective communication lies interaction.

"It is generally agreed that the language acquisition process in these children can be facilitated best by increasing their participation in natural contexts."

(Bedrosian, 1997)^[13]

Promoting balance between curricular and social skills

AAC policies should reflect an awareness of the role of interaction in developing language skills *and* in facilitating social closeness. There needs to be a balance between AAC use for the development of social and curricular skills. In order for this to happen, staff should hold at the forefront of policy implementation the need to enable functional communication skills.

Strategies

It is important to remember that AAC is different from normal spoken communication and may be slower than spoken language, with the exception of fluent signers. AAC may break up the flow of conversation and may be more easily misunderstood.

Several studies have identified the differences that occur between the conversational outputs of aided and unaided speakers. Aided speakers:

- rarely initiate a conversation.
- rarely terminate a conversation.
- are usually introduced to conversations about safe topics with which the conversational partner is generally familiar.

A number of facilitative strategies to develop positive communication are given in Appendix 2.

Communication strategies

AAC polices may need to incorporate an awareness of the need to employ a number of strategies which will aid more successful communication with AAC users.

AAC as a minority language

Socio-linguistic research indicates that AAC systems need to be seen as living, developing languages within whole school communities, and not just as tagged-on extras for peripheral individuals.

"Language is so inextricably interwoven with one's identity that giving up speaking language means, in some sense, letting go of one's identity as a speaking human being. It means then, behaving as a non-speaking human being – a status which throughout history has been a marginal one." (Erting, 1985)^[14]

There are two interacting dimensions in the use of language – the language skills of the community and the language skills of the individual. Language and communication are essentially social activities, and social factors have a large part to play in how AAC systems are acquired, used and developed in these dimensions. Systems also vary in their relative status and function, which affects attitudes, perceptions and hence use in different social contexts. Language acquisition and use can be effected at the level of the community as well as at the level of the individual.

Staff communicative competence

Policies should reflect the need for relevant staff to become communicatively competent in the forms of AAC used in a school's community. For an explanation of communicative competence, see Appendix 3.

Use of AAC and ICT – Into the Millennium

As technology has improved, more people with communication disabilities have access to speech via AAC methods and **Information and Communication Technology (ICT)**.

There has been widespread support for the use of technology as the medium to enable access to the whole curriculum and improve opportunities for learning. Increased opportunities for AAC users have been facilitated by, for example, switch access to graphic symbol software, and content-free software that incorporates the use of symbols.

"ICT should be used to give children with special educational needs maximum access to the curriculum and to help them to reach their learning potential ... By 2002 ... there will be more effective and widespread use of ICT to support the education of children with special educational needs in both mainstream and special schools." (DfEE, 1997)^[15]

Part 3: The educational

context

Much of the recent policy and thinking on special education has been based on the Warnock Report^[16], published in 1978, which introduced the concept of special educational need as opposed to categories of handicap. Rather than focusing on deficiencies within the child, it highlighted the need for special educational provision, ie that which is additional to or different from educational provision for children in mainstream education. This was based on the premise that "the purpose of education for all children is the same. But the help that individual children need in progressing towards them will be different." The report suggested two goals of education:

- 1 To enlarge a child's knowledge, experience and imaginative understanding, and thus his awareness of moral values and capacity for enjoyment.
- 2 To enable the child to enter the world after formal education as an active participant in society and a responsible contributor to it, capable of achieving as much independence as possible.

The introduction of statementing in the Education Acts of 1981 and 1993^[17], and the Code of Practice On Identification and Assessment of Special Education Needs^[17] ensured that all children with special educational needs were systematically identified and assessed. Special Education Need Coordinators (SENCOs) were introduced in all mainstream schools.

The 1997 consultative Green Paper 'Excellence for all Children' ^[15] and the follow-up document, 'Meeting Special Educational Needs: A Programme of Action' ^[15] set out aims for the provision of inclusive education. It suggests six key themes:

- High expectations of children with SEN.
- Effective support for parents.
- Promoting inclusion of SEN children in mainstream schools.
- Shifting the emphasis from procedures to practical support.
- Boosting opportunities for staff development.
- Increased partnerships between LEA's and local agencies, particularly speech and language therapy.

The practicalities of inclusion of all children into a broader concept of education have provoked a great deal of discussion amongst educationalists. Norwich^[18] recognises the "tensions in fulfilling the values of individuality and distinctiveness and the values of equality, connectedness and inclusion". He suggests three types of educational need that should be considered for all children:

- **Common needs** arising from characteristics shared by all.
- Individual needs arising from characteristics different from all others.
- **Exceptional needs** arising from characteristics shared by some. For example, children with specific needs eg visual impairment, severe communication difficulties, giftedness.

Ainscow^[19] describes "a shared vision which is one of the developing relationships and a curriculum that ensures that everyone feels valued, respected and reaches a high level of achievement." He suggests that it is the responsibility of the school to provide the right conditions for more inclusive policies and practices, which involves consideration of:

- · Overall organisation
- Curriculum and classroom practice
- Support for learning
- · Staff development

The importance of needs and rights

With the increasing move towards inclusive practice, all schools need to be aware of the needs and rights of children using AAC and are encouraged to address these issues through the development of appropriate policies.

Part 4:

Legal considerations in the use of AAC

Provision under the Children Act of 1989

The Children Act of 1989^[17] stated that every local authority should maintain a register of disabled children and should provide services to minimise the effects of disability on those children in order to give them the opportunity to lead as normal a life as possible. Assessment of needs could be made for the purposes of this Act and other previous legislation such as the Chronically Sick and Disabled Persons Act of 1970^[17] and the Education Act of 1981^[17]. Under the Children Act of 1989 and the Education Act of 1993^[17], duties are placed upon the school, LEA, health services and social services to cooperate closely in a collaborative manner.

Assessment and provision

Although most children with speech and language difficulties have been identified early in life, others may require further identification and assessment to give a more comprehensive appreciation of their needs. The Code of Practice on Identification and Assessment of Special Education Needs^[17] states that "The early identification of … speech and language difficulties and prompt remedial action are … essential."

The LEA is required to seek clear, recorded evidence of academic attainment and the nature of the communication difficulty. This includes the level of receptive and/or expressive language development and whether communication difficulties impede relationships and/or give rise to other emotional and behavioural difficulties.

With parental consent, a school is expected to seek advice from external specialists, including speech and language therapists, and to implement, monitor and evaluate individual education plans to support full access to and involvement in school and social life.

The school is expected to consult the LEA's support services and possibly regional experts in information technology for communication difficulties to explore the benefits of information technology, including training the child in its use.

If, at Stage 4 in the assessment process, access to a particular piece of equipment is deemed necessary, the LEA could conclude that the school should reasonably be expected to make such provision from within its own resources. If, however, a more significant piece of equipment is deemed necessary, the LEA may conclude that the school could not be reasonably expected to fund it.

Assessment and provision

It is relevant to include in the school's policy statement reference to how, when and by whom assessments are made. Some details of the range of assessments may also be given along with any recommendations regarding provision.

The Statement of Special Educational Needs

Schools are frequently hampered by unclear statements concerning language and communication difficulties, whether they relate to education under Part 2 and 3 in Statements, or under Part 5 'Non-Educational Needs' and Part 6 'Non-Educational Provision'.

Non-Educational Needs are those "which the LEA either propose to meet or are satisfied will be met, by arrangement or otherwise, by the health services ..."

Non-Educational Provision to meet the needs set out in Part 5 should be specified "which either the LEA propose to make available or are satisfied will be purchased by the district health authority, GP fund-holder or others." It is the LEA's responsibility to describe the needs accurately and clearly and to ensure that there is full agreement on the nature and quantity of the provision.

The recent Green Paper, 'Excellence for All Children: Meeting Special Educational Needs' [15] aimed to reduce barriers and improve collaboration between LEAs, social services departments and health authorities. Joint funding and managing of speech and language therapy is being considered in some areas, together with the purchase of therapy services by LEAs.

In the case of health service legislation, communication aids do not seem to be covered specifically but by reference to more general services and provision. District health authorities have discretion as to the priority they give to speech therapy and communication aid services. Circular guidance recommends that speech therapy services should be available to those who need them and that district health authority planning might include consideration of how to provide communication aids. As for welfare legislation, communication aids are not mentioned but the term 'facilities' could be deemed to include communication aids as daily living equipment. For a discussion of funding issues, see Part 7 of this document.

Clarity of Statements

A school's policy statement may need to consider the clarity of Statements in order to identify needs, provision and funding.

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The annual review of Statements

The 1993 Education Act requires LEAs to review Statements annually. The Code of Practice regulations prescribe how these reviews must be conducted and who should participate.

At the annual review, the Headteacher should seek advice from the child's parents and relevant professionals, which may include the speech and language therapist. The first review after the child's 14th birthday is particularly important as it is intended to focus on coherent planning for the future involving education, social services and career services. Other questions to be addressed include the need for AAC equipment, ongoing training and support.

The annual review

A school's policy statement may need to consider who should be invited to submit reports regarding language and communication, the nature of setting targets and who sets, monitors and assesses them. This also has implications for Individual Education Plans (IEPs) both in special and mainstream settings.

The policy may also need to consider the funding of electronic communication aids. Responsibility for the funding of such an item could be addressed within the annual review. It is strongly recommended that the training, support and maintenance of the equipment is considered.

The Curriculum

The National Curriculum^[17] has acknowledged the importance of AAC since 1995 and the Revised National Curriculum^[15] goes further by devoting a complete section to inclusion applicable to all four Key Stages. In addition to emphasising the setting of suitable learning challenges and responding to the diverse needs of pupils, teachers are required to take account of "potential barriers to learning and assessment." They are required to enable pupils to "participate effectively in the curriculum and assessment activities" and have "access to specialist equipment and approaches, or to alternative or adapted activities".

Teachers are required to provide for pupils who need help with communication, including "using ICT, other technological aids and taped materials ... alternative and augmentative communication, including signs and symbols ... translators, communicators and amanuenses."

Teachers are also advised of the need to be aware of the slowness of pace involved for some pupils using specialist equipment due to the specific nature of their disabilities.

The National Literacy Strategy

The National Literacy Strategy^[15] devotes a Framework for Teaching section to children with special educational needs, but there is no separate section about special schools. It acknowledges that some children "will always need access to systems such as symbols, signing, Braille or electronic communicators". The use of ICT, symbols, pictures, objects and signing are emphasised in developing a suitable learning environment within school and the literacy hour.

A number of schemes have been published to provide for the needs of those pupils who do not attain National Curriculum levels.

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The National Numeracy Strategy

The National Numeracy Strategy^[15] similarly acknowledges the use of "signing, Braille and symbols, and the provision of a range of tactile materials, technological aids and adapted measuring equipment." Unlike the National Literacy Strategy, it addresses the needs of special schools and recognises that some pupils may need to work at levels lower than those in the Framework.

The National Curriculum for IT

The use of technology in AAC is supported by the IT section of the National Curriculum^[21]:

"Information technology capability is characterised by an ability to use effectively IT tools and information sources to analyse, process and present information and ... to control external events. This involves:

- Using information sources and IT tools to solve problems.
- Using IT tools and information sources, such as computer systems and software packages, to support learning in a variety of contexts.
- Understanding the implications of IT for working life"

Accessing the curriculum

A school's policy statement may need to consider how AAC can support the curriculum and provide access to it. Details of the range of AAC methods and equipment used in the school may be helpful, along with examples of how they are used.

For older pupils, schools may also need to consider how AAC is used to access the wider curriculum in terms of preparation for life beyond school, advocacy issues and other social needs.

Part 5:

Assessment, planning and recording

Roles and responsibilities

To achieve a continuous and consistent service for a child with AAC needs, a huge amount of liaison is required. This liaison begins soon after birth and continues throughout schooling and beyond into adulthood. It may take place locally at school or at regional level. In short, liaison must occur over time and among those involved at any one moment in time.

Liaison over time

There needs to be planning for the *transitions* that occur in the child's life between preschool and school age, at school-leaving age, and at any other change during life. This will involve agencies such as social services, the health authority, careers service and voluntary organisations, in addition to the local education authority. The agencies involved may operate at both local and wider levels (eg child development centres, regional communication aids centres).

Liaison between those involved

The disciplines and agencies most likely to be involved with the child, family and carers at any time may include those listed below:

- Teachers
- · Learning support staff
- Speech and language therapy
- Physiotherapy
- Occupational therapy
- Clinical/educational psychology
- Specialists in hearing and vision (health/education)
- Paediatrician/medical specialists
- LEA specialist support
- IT specialists
- Equipment providers
- Technical support services, eg clinical engineers
- · Social services

The relative levels of input will vary in relation to the changing needs of the child.

The importance of liaison

Good teamwork is the key to achieving effective AAC. Time for staff liaison therefore has to be prioritised.

The school's role

The school should consider its role in ensuring that information between the disciplines and agencies listed above is shared and coordinated at each stage.

Achieving intervention

In all aspects of intervention relating to AAC, the school should aim to achieve three main functions:

- Development of a whole school culture which supports and enhances multimodal communication.
- Coordination of the assessment process across all agencies for the individual child.
- Coordination of AAC implementation and monitoring for the individual child.

To enable effective AAC implementation, Headteachers should define clear role responsibilities.

The management structure will depend on the individual school and factors such as size, strengths of individual personnel and number of pupils requiring AAC etc. Useful models include:

• The AAC team/information communication team

A consistent multidisciplinary group of staff who are involved with the needs of any pupil with AAC needs.

• The AAC coordinator

A designated member of staff who creates a team by involving the most relevant professionals for an individual pupil.

SENCO

A designated member of staff responsible for coordinating all special needs, including AAC.

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Development and planning considerations

The use of AAC in schools needs to be an integral part of the SEN planning and development in any school.

The school development plan

A school development plan is a useful tool for the development of all areas of school life. It may be drawn up to cover the academic year or the financial year as part of the overall budget planning of the school. It is usually evaluated annually and a new plan written for the following year.

It is entirely the decision of each school which format of school development planning is adopted, which areas are covered, whether AAC is addressed separately from the other aspects of language and communication, and who is involved in preparing the documentation. The school may need to consider to what extent AAC/communication needs should be a separate area or part of another area of the curriculum. Schools should also try to ensure that there is no conflict across curricular areas, especially IT and English, rather, that developments complement one another. In the light of the new initiatives of Literacy Hour and Numeracy Hour, it is important that AAC is not sidelined.

Sample plans and evaluations for AAC and communication within a school's development plan can be found in Appendix 4.

The approach to planning

It is good practice to have a collaborative and interdisciplinary approach to planning. In addition, the governing body needs to approve every area of the plan, and staff need to be fully aware of the contents. This promotes a sense of ownership and therefore a greater likelihood of success as a result.

Assessment of the individual

The assessment process may have begun prior to the child first starting school and the need for AAC may or may not already have been established. Whatever the case, as soon as a school is aware that AAC may be required, responsibility should pass to the person or team that coordinates assessment for AAC. At this stage it may be necessary to liase with relevant outside agencies (sensory and psychological services, for example). Assessment will be carried out over a period of time and reassessment will be necessary at regular intervals. The main areas of assessment should include medical details, visual skills, auditory skills, cognitive skills, communication skills, communication opportunities, motor skills, seating and positioning. For further details see Appendix 5.

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Planning and recording for the individual

Following assessment, a plan of action should be developed and agreed upon by those responsible for the child's education at the Annual Review. There needs to be a clear format within the child's **Individual Education Plan (IEP)** to provide information on:

- the equipment required.
- the support needed to achieve aims and who is to provide it.
- clear roles and responsibilities for those supporting the child.
- · what will the child achieve.
- · how to work towards the aims.
- · how the child is progressing.

The school should try to ensure that there is a clear and consistent system of setting targets and recording progress, which incorporates contributions from all those working with the individual. This may be through the IEP or other means. The challenge is to combine all the information in a coherent and simple format and make it accessible to all.

AAC and the Individual Education plan (IEP)

Issues to address in relation to AAC development in the IEP:

- Should AAC goals be included with the National Curriculum goals or separately?
- Should communication goals and physical access goals be considered separately or together?

Part 6:

Development and training issues

"By 2002 there will be a clear structure for teacher's professional development in SEN [Special Educational Needs], from a strengthened attention to SEN issues in initial training through to improved training for headteachers, SEN coordinators and other SEN specialists ... There will be a national framework for training learning support assistants ... Training in special educational needs is a priority, whether teachers work in mainstream or special school or in LEA support services."

(DfEE, 1997)^[15]

"At the conclusion of a qualifying course, a successful student is expected to be able to demonstrate the ... ability to make use of information technology and AAC equipment ... Speech and language therapists work within a climate of rapid change in health, education, social services and voluntary sector settings ... it is crucial that individuals continue to expand their knowledge base and to enhance their skills following qualification."

(Royal College of Speech and Language Therapists, 1996)[21]

This section aims to highlight the areas of development and training needed in order to develop the expertise required for the successful implementation of AAC use. The amount of training at present is sparse and dependent on the interests of individuals. Different levels of training opportunities will be required according to the roles of those working with the AAC users and their previous experience. Teachers, therapists, carers and others are all involved in this process. Training of staff is essential before any new pupil arrives in school so that the child's individual needs can be met effectively.

Who needs training?

Communication is important in all aspects of life. It provides access to both the curriculum and the wider community. It is therefore essential that all the significant people in the AAC user's environment receive training. Fig 2 (overleaf) illustrates those who may be included in the AAC user's life.

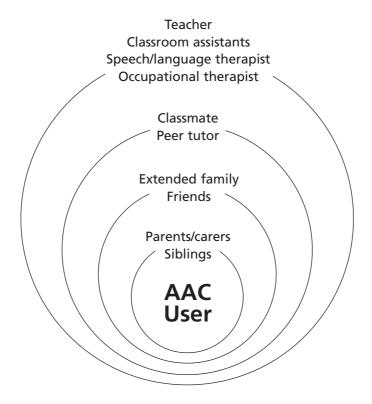


Fig 2: An AAC user's 'Circle of Friends' (adapted from Blackstone, 1991)^[22]

Identifying the training needs of the school

The identification of AAC training should form an integral part of the whole school development plan. To identify specific AAC training, staff must become aware of the variety of communication needs within their school. A member of staff should be identified to take responsibility for organising and coordinating training in appropriate areas. There should be clear responsibilities to ensure that AAC training is included within the school development plan.

There is a responsibility to train individuals in the use of AAC equipment as made clear in the statement from the Department of Health in the 1999 NHS Supplies Contract: [20]

"The contractor [NHS] must employ for the purposes of [the] contract only such persons as are careful, skilled and experienced in the duties required of them ... and sufficiently trained and instructed ..."

Issues that the policy should clarify include the following:

- Should the organisation of training be the remit of:
 - the staff development coordinator?
 - the AAC coordinator?
 - the Special Education Needs Coordinator (SENCO)?
 - the AAC team/ICT team?
- How will training be funded and evaluated?

Whole school awareness training This is essential for all staff including new staff of

This is essential for all staff including new staff, governors, therapy staff, mealtime supervisors, transport staff, administrative and caretaking staff. By providing training at this level, the establishment is acknowledging the importance of communication and the practical application of the AAC policy. Training may be delivered by a range of experts in the field of AAC (eg AAC user, parent/carer, teacher, speech and language therapist and speech therapy assistant, occupational therapist, and physiotherapist) and should demonstrate the importance of interdisciplinary working.

Awareness training should include the following:

- What is communication?
- · Communication and equal opportunities.
- Status of AAC systems.
- Existing AAC systems in the environment, ie who is using what, where and when.
- Hands-on experience of AAC systems.
- · Modelling good practice.
- Talking with AAC users.
- · An understanding of the terminology.
- An understanding of the importance of good positioning (and seating).

Awareness training

Awareness training should be part of the induction process for all new staff.

Training related to individuals

This type of training is necessary for those working closely with individuals using AAC systems, ie classroom assistants, teachers, therapists, parents and carers. Outside agencies, such as local specialist centres, regional and tertiary centres may be involved in providing this training.

Training aspects would include:

- Observational skills in the following areas; physical needs, seating, interaction and sensory abilities at a functional level.
- Developing opportunities for communication.
- Providing rich communication environments.
- · Practical ideas and activities.
- · Seating and positioning general principles.
- Access to symbols and technology for communication.
- Signs, symbols and speech output devices recommendations and appropriateness to the individual child.
- · Vocabulary selection and use of language.
- Using ICT to develop communication skills.
- Interdisciplinary working.
- Awareness of when to call in the next level of support/assessment.

Support training

To achieve good collaborative working practices, a support system for staff working with AAC users at all levels should be in place. This should be on-going and regular.

Professional development opportunities for the AAC/communication coordinator and team

In order for the individual and team at this level of expertise to carry out their responsibilities, training and development opportunities will be required in the following areas:

- An understanding of different models of team working, ie multidisciplinary, interdisciplinary, transdisciplinary and collaborative team working. Knowledge of the barriers to successful working should also be understood.
- · Observational and assessment skills.
- A clear understanding of how AAC strategies impact upon communication.
- Seating, positioning and access issues.
- An understanding of the place of communication socially and in the curriculum.
- Clear understanding of language and communication development (including preverbal communication).
- Knowledge and understanding at overview level of the variety of AAC systems and their relative advantages and disadvantages.
- Awareness of the variety of support available outside the establishment.
- Knowledge of and expertise in the AAC systems in use in the establishment.
- Planning and evaluating the curriculum taking into account the needs of the AAC user.
- How to implement AAC through Individual Education Plans.
- Opportunities for reflection on own practice and regular updating of knowledge and developments in the field.
- Awareness and knowledge of how other difficulties affect communication skills, eg sensory abilities.
- Understanding of the roles and responsibilities of others, both professionals and carers within the team and the school.

Professional development opportunities

In order for professional development opportunities to be implemented within the school's AAC policy, the following are points should be considered:

- Funding for:
 - release from regular responsibilities
 - responsibilities of the post-holder
 - equipment and associated resources
 - the training budget for the whole school
 - assessment by specialist and/or tertiary centres
- Clear access to training and support from the outside agencies, including accredited training.

Training and support from outside agencies

Schools need to be aware of outside agencies which can be accessed to provide training and support for their staff. A school in a particular locality may develop its skills to the level where it becomes a specialist centre and can offer support and training to other schools.

Specialist centres

The function of a specialist centre is to:

- Create and support a network at coordinator level.
- Function at an interdisciplinary or transdisciplinary level.
- Provide assessment-related training, ie a team working with an individual locally can discuss the needs of the AAC user with the specialist team that is able to offer advice.
- Provide methods of teaching and accessing the curriculum specifically related to the individual's communication needs.
- Create new teaching materials where appropriate.
- Disseminate resources (local or tertiary) within their area.
- Provide training for AAC and access to the curriculum.
- Provide on-going training for coordinators.

Tertiary centres

The function of a tertiary centre is to:

- Facilitate research and provide a stimulus for others doing research.
- Advocate at a national level.
- · Coordinate specialist centres and provide relevant training.
- · Assess individuals with the most complex needs.
- Acquire knowledge and understanding of relevant educational legislation and its implication for practice, and advise schools and colleges in curriculum and policy development.
- Provide a focus and impetus for disseminating information on new developments in the field.

Summary

This section has demonstrated the need for training:

- to be transdisciplinary, on-going and needs based.
- to meet the individual needs of both the AAC user and those supporting him/her.
- to ensure that all staff maintain and extend their knowledge through on-going training and opportunities for development.
- to be regularly reappraised.

Coordinated training

It is essential that professional bodies, local education authorities and health authorities continue to work together to provide support and opportunities for training.

Part 7: Funding

There is widespread concern that clear funding relating to AAC services and equipment is often not made available by any of the statutory agencies of health, education and social services. There is inequality of provision throughout the United Kingdom. Approaches to the three statutory agencies are often frustrating and the communication needs of severely disabled pupils are not met.

Background

The 1994 ICAC (Initiative on Communication Aids for Children) report on good practice¹²³¹ set out to address the need for identification, assessment and support of children who require communication aids to help overcome severe spoken and/or written communication difficulty. Their recommendations were as follows:

- 1 It is essential to establish services at a local level and to develop arrangements which provide the appropriate coordination between local, regional and national services, ensuring a continuum of provision depending on each child's needs.
- 2 Multi-professional assessment and joint funding is entirely appropriate and should prevent many of the problems that children needing communication aids are facing.
- 3 The establishment of a multidisciplinary network that can operate locally will facilitate the effective assessment of many children's communication difficulties.
- 4 Local education authorities should give serious consideration to setting aside a small budget to contribute to the assessment of children needing more expensive equipment, the provision of equipment and on-going support, and that this be done in partnership with local health and social services.

The government White Paper 'The New NHS' [24] urges that the NHS works in partnership with other organisations:

"Organisational barriers must be broken down and strong links with local authorities and services they provide must aim to place the patients at the centre of care process, after their needs have been assessed ... In the future, patients with continuing health and social care needs will get access to more integrated services through the joint investment plans for continuing and community care services which all health authorities are being asked to produce with partner agencies. The govern-

ment will also be exploring the scope for even closer working between health and social services through, for example, pooling of budgets. The benefits will be particularly felt by patients, such as those with disability ... who need the support of both health and social care systems."

A 1997 House of Commons Health Committee report^[24] discusses the provision of equipment:

"We are concerned to hear evidence from our witnesses that the provision of equipment for sick children is beset by difficulties including:

- fragmentation of provision
- disputes within the NHS and between social and education services over who should fund equipment and in what setting (for instance, education authorities not permitting equipment they supplied to be used outside school premises, or an Acute Trust not allowing equipment it supplied to be used at home)
- the absence of a mechanism for identifying need, or for identifying equipment already available and not being used
- · delays in provision

This situation is clearly wasteful of resources and results in children not receiving the appropriate equipment at the appropriate time and with the appropriate training in its use. We recommend that the government issues guidance on the introduction of suitable mechanisms at local level to:

- · identify need and the availability of equipment
- improve the overall management and coordination of the purchasing, utilisation, maintenance and evaluation by health, social and education services and the voluntary sector
- provide a service which is easily identified by families and professionals, and which is cost effective."

In the past, GEST (Grants for Educational Support and Training) funding has had a long-term impact in some areas, as equipment could be purchased for assessment and loaned to children. GEST funding was also used to purchase devices for individual children and to provide training for school staff. Local education authorities interpreted the GEST funding widely. This 'kick-started' the purchase of equipment by some education authorities.

Some local education authorities use Access Initiative Funding as part of the Standards Fund to provide technology for pupils within mainstream environments. Individual schools may have identified a portion of their whole school budget for the provision of communication equipment and services.

It seems likely that the 1999 NHS Supplies Contract for the Supply of Electronic Assistive Technologies^[20] will have some effect on the funding of communication aids:

"This specification is for the supply, installation, commissioning and maintenance of electronic assistive equipment which will enable people with severe disabilities to communicate and function independently within their home/habitual environ-

ment. The equipment will be installed in domestic premises, educational establishments or health/social-care accommodation or may be portable or wheelchair mounted ... The purpose of the provision is to alleviate handicap (for example, to enable the user to maintain or have increased independence, to enhance safety and security) and to relieve the burden of caring on others."

The document continues by listing all the features required, ie user interface (access), mounting, telephone and intercom communication, written communication, communication aid functions, computer operation, integration with wheelchair control systems, and simple training systems (cause and effect equipment). It recommends that preventative maintenance should also be carried out annually.

The current situation

In reviewing current practice, it would appear that the following problems still persist:

- There is an inconsistency in policy and practice.
- There is no national framework.
- There is an inequality of opportunity and provision.
- There is no legal entitlement to provision.
- Childrens' access to AAC is dependent upon chance, geography and the statutory organisations.
- Charities continue to partly or wholly fund AAC equipment for children.
- There is no identified responsibility for funding AAC resources for individual use.
- There is no earmarked funding for assessment, training and support.
- There is no earmarked funding for maintenance and replacement of equipment.

Education authorities may or may not provide appropriate equipment for written communication, although it appears to be easier to obtain a computer for the completion of written work than a speech output device to enable a child to communicate in class. There are particular issues regarding the provision of integrated systems which are used in a variety of settings, ie in the class, at home and in the community.

Some of the current funding arrangements throughout the country include:

· Joint funding

This involves health, education and social services representatives working together as a committee to provide equipment where necessary, provided their budget allows. A speech and language therapist is generally closely involved. Joint funding practice has been established in areas such as Norfolk, Kent and Oxfordshire. (See Appendix 6)

· Health funding

Occasionally there may be a centrally held budget within the health authority which aims to purchase equipment for adults and children. However, this situation is changing with the new NHS supplies contract, as funding will be held regionally.

· Education funding

This has been mainly achieved through the statementing process of funding equipment for ICT. It would appear that in some special schools, the less expensive aids are purchased for individual children from money donated to the school or from the

school budget. In East Sussex, a mainstream school and education authority jointly purchased an expensive communication aid for an AAC user integrated into a secondary school.

· Social services

Occasionally equipment is purchased under Aids to Daily Living budget, but this is often difficult to achieve.

Charities

There is evidence that charitable foundations continue to play a large part in funding communication aids outright or agreeing to partly fund an aid. Some charities will provide computer equipment for home use as a source of recreation for the AAC user. There are several charitable foundations with the specific aim of providing communication aids and computer equipment.

Recommendations

Funding implications

Funding needs to be considered at all levels and across all statutory agencies. Funding should be made at the following levels to meet individual needs, for services, equipment and training:

Individual level

- assessment
- provision, maintenance and replacement of AAC systems
- training
- speech and language therapy input

Whole school level

- AAC Policy
- AAC coordinator(s) and/or team
- technical support
- training

Specialist centres

Schools need to have access to specialist centres, which would offer the following support:

- interdisciplinary or transdisciplinary assessment
- dissemination of information
- training
- a resource library of equipment

Regional and tertiary centres

These centres would provide:

- assessment of children with more complex needs
- · research and development
- an advocacy role at national level

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The above support would involve capital costs in establishing centres where none have existed before. Human resources and equipment expenditure would need to be established and agreed.

Regional coordination

The government has set up five pilot projects in a 'Programme of Action'^[15] where LEAs and other interests work together on a regional basis, concentrating on the provision of services to children with low-incidence disabilities. AAC users clearly fall within this definition and should be explicitly included in the remit of these pilot projects *and* in the regional coordination of provision planned for all areas from April 2000. The regional groups should collaborate with AAC providers and representative users. They could also ensure that all children within the region who may require a communication aid have access to a resource library, which can loan equipment to children being assessed.

Multi-agency working

In its Programme of Action^[15] the government states that it is "committed to encouraging effective joint working at every level to support children with SEN".

The more flexible funding arrangements referred to in both the New NHS White Paper^[24] and the Programme of Action should include mechanisms to ensure the provision of suitable AAC devices to children who require them. Multi-agency or inter-agency groups could be responsible for allocating funds and making such provision.

The establishment of a database to monitor the placement of AAC equipment and technology would be beneficial and could form the basis for a loan bank of equipment. The database could be held by the local specialist centre who would act as a source of information for people who need to try a piece of equipment. Equipment included in the database could be funded by health, social services and education.

Meeting individual needs

The actual decision regarding the specific equipment and training to be provided will need to be made through specialist assessment by the professionals directly involved with the child and his/her family. Ideally, equipment should be obtained within three months of the assessment. This may be the equipment recommended or loan equipment if the decision is unclear. Ideally, loan equipment should be available within a month of the assessment.

Provision and funding

There is a clear need for a government lead to establish the specific responsibilities of the statutory agencies with regard to the provision of AAC equipment, related support, and training.

An inter-agency approach will meet the needs of children with severe communication impairments most effectively and should take into account existing models of good practice.

Conclusion

It is recognised that pupils' self esteem, communication and language will be enhanced if there is a community of AAC users with whom they can use, share and develop communication. The status of AAC within educational establishments is still improving, more rapidly than in the wider community.

We have an obligation as professionals to ensure equal access to all learning opportunities. The organisation of the environment is the key to providing the necessary teaching and structures for developing language and communication skills. The barriers to successful implementation of AAC must be recognised and broken down in order to achieve an effective and functional communication environment.^[7]

Specific needs should be considered carefully in order to ensure that decisions regarding AAC are taken with individual needs foremost. This requires a considerable amount of insight and forethought by schools as this approach has implications for staffing, and the funding of training and equipment.

The challenge of implementing AAC policies within the practical considerations of the current educational climate is a responsibility of us all. If we can meet that challenge, we will empower both professionals working in the field and the young people we are helping by providing them with a structure for the development of AAC from their own perspectives and environments. Appropriate intervention throughout education should enable the young person to become an active participant in society and an independent contributor to adult life

Bibliography

- [1] **von Tetzchner S & Martinsen H**, 1996 *Situating Augmentative and Alternative Communication Intervention*. In von Tetzchner S & Jensen M H (Eds) Augmentative and Alternative Communication: European Perspectives. Whurr
- [2] **Hoskins**, 1990 *Collaborative Consultation: Designing the Role of Speech-Language Pathologist in New Educational Context*. In W Secord (Ed) Best Practices in Speech-Language Pathology, pp29-38. Houston Texas. The Psychological Corporation.
- [3] **Glennen S and DeCoste D**, 1997 *Handbook of Augmentative and Alternative Communication*. Singular Publications
- [4] **Woll & Barnett**, 1998 *Towards a Socio-linguistic Perspective on AAC*. Augmentative and Alternative Communication
- [5] **Hawking S**, Speech at the launch of the DfEE/DoH joint working party Project on Children and Communication Aids (ICAC), London
- [6] **ISAAC**, Mission statement, http://www.isaac-online.org/isaac/isaac/About/index.html
- [7] **Beukleman D and Mirenda P**, 1998 Augmentative and Alternative Communication: Management of Severe Communication Disorders in Children and Adults. Second Edition. Paul Brookes
- [8] Blackstone S, 1992 Augmentative Communication News. Vol 5 No 3
- [9] **Murphy J & Scott J**, 1995 Attitudes and Strategies Towards AAC A Training Package for AAC Users and Carers. Department of Psychology, University of Stirling, Stirling
- [10] **Barnett S & Bax M**, 1996 Communication and Young Adults with Cerebral Palsy: London Report for Scope. Scope
- [11] Larcher J, 1995 Leaving School Crisis or Opportunity: Which is it for AAC Users? In Millar S & Wilson A (Eds), Widening the Perspective: Collected Papers, 1995 Call Centre, Edinburgh
- [12] **Calculator and Jorgensen**, 1991 *Integrating AAC Instruction into Regular Education Settings:* Expounding on Best Practices. Augmentative and Alternative Communication, 7 pp204-214
- [13] **Bedrosian J L**, 1997 Language Acquisition in Young AAC System Users: Issues and Directions for Future Research. AAC Vol 13 pp179-185

- [14] **Erting C**, 1985 *Sociocultural Dimensions of Deaf Blind Education: Belief Systems and Communicative Interactions.* Sign Language Studies, Vol 47 pp111-126
- [15] Department of Education and Employment (DfEE)
 - 1997 Excellence for All Children: Meeting Special Educational Needs
 - 1998 Meeting Special Educational Needs: A Programme of Action
 - 1998 The National Literacy Strategy Framework for Teaching
 - 1999 The National Numeracy Strategy Framework for Teaching Mathematics from Reception to Year 6
 - 199X IT Section of National Curriculum ref missing
 - 1999 Revised National Curriculum
- [16] The Warnock Report, 1978 Special Educational Needs. HMSO: London
- [17] Department of Education
 - 1970 Chronically Sick and Disabled Persons Act
 - 1981 Education Act
 - 1989 Children Act
 - 1993 Education Act
 - 1994 Code of Practice On Identification and Assessment of Special Education Needs
 - 1995 National Curriculum
- [18] **Norwich B**, 1996 *Special Needs Education or Education for All: Corrective Specialisation and Ideological Impurity.* British Journal of Special Education, Vol 23 No 3
- [19] Ainscow M, 1997 Towards Inclusive Schooling. British Journal of Special Education, Vol 4 No 2
- [20] Department of Health
 - 1988 Circular HN(88)26
 - 1999 NHS Supplies Contract for the Supply of Electronic Assistive Technologies
- [21] **Royal College of Speech and Language Therapists**, 1996 *Communicating Quality 2*. RCSLT, London
- [22] Blackstone S, 1991 Augmentative Communication News. Vol 4 No 2
- [23] **Initiative on Communication Aids for Children (ICAC) Report**, 1994 *Communication Aids for Children: Guidelines for Good Practice.*
- [24] House of Commons
 - 1997 The New NHS. Government White Paper. HMSO
 - 1997 Health Services for Children and Young People in the Community: Home and School. Report of the House of Commons Health Committee, February 1997. HMSO
- [25] **Easton J & Bennet J**, 1988 *Guidelines for Communication Aid Users and their Caregivers.*Assistive Communication Aids Centre, Frenchay Hospital, Bristol
- [26] **Light J**, 1989 *Towards a Definition of Communicative Competence for Individuals Using AAC Systems*. Journal of Augmentative and Alternative Communication, Vol 5 No 2 pp137-144
- [27] **OFSTED** Reference missing
- [28] **Parker K**, 1997 *The provision of Equipment for Children with Special Needs in Norfolk*. Office for Standards in Education (OFSTED) 1995 London, HMSO

Useful resources and websites

Resources

Robertson et al, 1996 Core AAC Curriculum. SCOPE

Eames J et al, 1999 Integrating Communication and Education (ICE). Futcher School, Portsmouth UK

Ford J, 2000 Speak for Yourself. Scope, London

Latham C and Miles A, 1997 Assessing Communication. David Fulton, London

Websites

Note that these URLs are current at the time of publication. They may change over time.

Barkley AAC Centre aac.unl.edu

CALL Centre callcentre.education.ed.ac.uk/index.html

Judith Kuster www.mankato.msus.edu/dept/comdis/kuster2/welcome.html

SALT in Practice www.speechmag.com

ASHA www.asha.org

Trace Centre www.trace.wisc.edu/index.html

Makaton www.makaton.org

Communication Forum www.communicationsforum.org.uk/index.shtml

ISAAC www.isaac-online.org

Communication Matters communicationmatters.org.uk

The SLP Start Page members.tripod.com/Caroline Bowen/slp-eureka.htm

YAACK www.mrtc.org/~duffy/yaack

ACE Centre www.ace-centre.org.uk

Blissymbolics Communication

International

home.istar.ca/~bci/

Royal College of Speech and

Language therapists

www.rcslt.org

Appendix 1:

AAC policy framework

This document does not provide a detailed policy for schools to adopt because of the reasons outlined on page 5. However, a brief framework for a policy is outlined below:

Introduction

This should include:

- · a mission statement
- a definition of AAC within your environment
- a description of the AAC population within your school

Aims of the Policy

This should include a description of:

- the ethos of the environment
- the aims for the environment
- the aims for the individual

Objectives

This would include:

- · roles and responsibilities within the school structure and of individuals
- collaboration with parents and other agencies
- · expectations of pupils
- assessment, recording and reporting arrangements
- method of delivery within the context of the curriculum
- intervention strategies
- · organisations of resources
- · framework for training and support
- · financial organisation

Appendix 2: AAC strategies

AAC policies should incorporate an awareness of the need to employ a number of strategies that will aid more successful communication with AAC users. Facilitative strategies ^[9] to develop positive communication include:

- WAIT the AAC user takes longer than natural speakers to initiate a communication attempt this is probably the most important thing we can do.
- Be aware that the AAC user may be using a wide range of different communication modalities. Look for the user's non-verbal clues, especially gesture.
- Make sure that the user has all the necessary vocabulary in his/her AAC system that he/she knows where this vocabulary is stored/displayed and that he/she knows how to use it.
- Make time to have informal chats without a fixed agenda.
- Don't always stick to safe topics. Ask questions about something you genuinely don't know about.
- Try to explore one topic fully before moving on to another don't flit from one idea to the next.
- Check with the user that you have understood don't assume that you have, and never pretend that you have.
- If a misunderstanding is occurring, give possible interpretations of what the user is trying to say rather than definitive ones.
- Using a communication aid is slow. Initially the user may only be able to use one or two
 words. As unaided speakers we use 150-200 words per minute. The equivalent for an aided
 speaker is between 5 and 20 words. This has obvious implications for developing equality of
 opportunity in communication particularly where the pupils are educated in groups of
 mixed ability or in integrated settings.

The following guidelines^[25] were compiled at the Assistive Communication Aids Centre at Frenchay Hospital. They may be helpful in developing positive interaction strategies:

- Encourage use of the communication aid at all times with friends, relatives etc.
- Don't refer to the aid as a toy or use any other comments which may belittle the user.
- Remember that using an aid requires skill and commitment.
- Professionals should use the aid to appreciate how it feels.
- Don't talk over the top of the person or attempt to complete their sentences unless they prefer this type of anticipation to speed things up.

- Don't ask and answer your own questions, eg "did you go out last night? Yes I'm sure you did."
- Don't ask several questions at one time, eg "would you like tea, coffee or chocolate?"
- Try not to use closed questions, ie questions that only require an answer 'yes' or 'no'.
- Remember the focus is functional communication don't be pedantic. "pleas give me my bloo jumpr" is OK.
- Short cuts are acceptable especially when they speed things up, eg "R U OK".

Appendix 3:

Communicative competence

A definition of communicative competence:

"Communicative competence is the ability to functionally communicate within the natural environment and to adequately meet daily communication needs ... In order to achieve communicative competence, individuals using AAC must integrate their knowledge, judgement and skills in linguistic, operational, social and strategic competence. Developing skills in only one or two of these areas is not functional for any individual." (Light 1989)^[26]

AAC users need to learn two distinct linguistic codes – the native language as spoken by those around them and the code demanded by the AAC system itself. There is a considerable input-out-put asymmetry here as AAC users are expected to conform to the rules of spoken language when using their AAC system, which themselves demand unique rules. A representation of the operation of communicative competence is shown in figure 3.

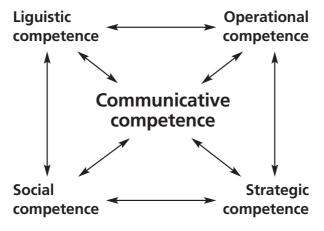


Fig 3: Communicative competence in operation
(adapted from Light, 1989)

Operational competence

"The user must also develop the technical skills required to operate the system, including the skills to use the access method(s) or transmission technique(s) as well as the skills to operate specific device features." (Light 1989)

For example, the AAC user must be able to access their communication system (sign or symbol) in the easiest way *for them*. In addition, the user may have a speech output device/voice output com-

munication aid, which he/she accesses with a two-switch scan. Finally, the AAC user has to learn when to use which mode of communication in order to be an effective communicator in any situation.

Social competence

"The user of an AAC system must also possess knowledge, judgment and skill in the social rules of communication, including both the socio-linguistic aspects and the socio-relational aspects." (Light 1989)

Socio-linguistic aspects of language refer to the pragmatics of communication, ie initiating, maintaining and closing conversations, requesting information, turn-taking etc. The individual socio-relational aspects of communication include a desire and need to communicate, active participation in conversations and responsiveness.

Strategic competence

"Individuals require strategic competence to make the best of what they do know and can do. They need to develop compensatory strategies to allow them to communicate effectively within restrictions." (Light 1989)

An example of a long-term strategy would be the use of telegrammatic utterances, and prediction by the communicative partner. This increases the speed of communication.

Appendix 4: The school development plan

It is not a legal requirement for schools to produce a development plan, yet most have made use of them for a number of years. However, the plan is an important source of evidence for OFSTED Inspection and indeed assists the inspectors in reporting the school's aims and priorities. Judgments are based on the extent to which:

"... the school has aims, values and policies which are reflected through all the work of the school ... (T)he school, through its development planning, identifies relevant priorities and targets, takes the necessary action, and monitors and evaluates its progress towards them." (OFSTED 1995)¹²⁷¹

The plan itself may cover all curriculum and management areas. Targets need to be set, which themselves could be broken down into types. These types could include development, training, new resources, documentation, maintenance and 'other'.

It is important that the yearly area plan is balanced and does not focus entirely on training, for example, but includes new purchases, new developments for the school and ongoing maintenance of what is already in place. The auditing of resources and training needs should be included, either as a new development or as maintenance.

Criteria for success need to be established; monitoring needs to be undertaken by an individual other than the coordinator who drafts each individual section of the plan – it could also be undertaken by a group of people or a team. Dates need to be fixed for completion with estimates of the costs involved and sources of funding.

As a school development plan should show elements of long-term vision and aims, it is important that brief outline plans are shown for subsequent years as well as the current one. It is generally considered that a forecast over a three-year period is sufficient.

An example of a school development plan is shown overleaf.

An example of a school development plan

School Development Plan 1999/2000

Area: Speech, Language and Communication Coordinator:

Ref	Target	Туре	Success Criteria	Monitoring	Comp. date	Est. cost	Funding
1	To draw up aims and plans to develop as a resource school for AAC in liaison with the LEA and SALT & to identify funding.	Dev	Role agreed, resource needs and funding identified; role marketed; first AAC aids purchased.	Headteacher LEA/Gov body SALT Dept	Mar 2000	250 500	Capitation Stand fund Sponsors
2	Annual review of personal com- municators.	М	Pupils assessed, aids updated.	Headteacher	Mar 2000	?	Health
3	New reading symbol books and tapes.	NR	Purchased and in use.	Curric. meetings	Sept 99	200	Capitation
4	Obtain funding and plan a summer school.	Dev	Pupils and parents attending.	Headteacher	Aug 99	?	LEA(?)
5	Implement assessment policy and purchase new assessment resources.	Dev NR	Assessment procedures drawn up and in use to raise achievements.	Curric. meetings	Dec 99	100	Capitation
6	Evaluate school targets.	M	Evaluated and revised as necessary.	Governing body	Sept 99	Time	
7	Further develop roles of SALT assis-	M	More children receiving tuition;	Headteacher	Ongoing	Time	
8	tants and Makaton trainers. Develop working role of SALT in school.	T M	training for staff and parents. More time/input/individual work.	SALT SALT Dept	Ongoing	Time	
9	DLS training for coordinator Training for additional SALT assistant.	T T	Coordinator trained in DLS. NNEB commenced SALT course.	Headteacher Headteacher	Dec 99 Mar 2000	Free ?	LEA (?) Stand fund
11	Monitor teaching and maintain portfolio.	M	Classes monitored twice a year.	Headteacher	Mar 2000	Time	Staff cover

Future Developments

	Outline plans for 2000/01		Outline plans for 2000/02	
A B	Obtain sponsorship for AAC equipment & develop outreach support. Secure local technicial support for maintaining AAC equipment.		Continue the development of curriculum and training to meet the needs of SLD pupils and those with complex communication difficulties.	
C D	Develop materials for SLD/PMLD/Sensory impaired pupils. Maintain partnership with SALT Dept.	G H	Review policy document. Review record-keepiing and assessments.	
Е	Evaluate teaching and resources re school's future role, to include symbol systems, EDY teaching and the PECs system	I	Evaluate AAC Resource role.	

CAT Development Plan, April 1999 to March 2000

Staff responsible:

Priority Areas	Long-term Goals	Targets	Resource Implications
Support the pupils who have been assessed by the CAT	Following a CAT assessment, all people working with the child at school (and home where appropriate) to be confident in their ability to carry out CAT recommendations.	In Sept. where classroom staff do not transfer with child, receiving staff to be shown video of last CAT assessment and be trained by CAT or staff who have been working with the child.	Time in classroom with and without pupil.
	Continue cycle of assessment, monitoring, evaluation and review of CAT pupils.	Continue to attend goal planning meetings for CAT pupils.	Goal planning time
		Liaise with classroom staff to ensure CAT recommendations remain realisti- cally achievable.	
		Where circumstances have changed, briefly reassess pupil keeping video record to share with classroom staff later on.	A supply of 1 hour video tapes and 2 tapes for viewcam
Updating information	To ensure members of staff know when to approach CAT for help.	Regular update on a noticeboard in staffroom.	Notice board space
Equipment	Provision of equipment for pupils following assessment and successful loan of equipment for a trial period (eg switches, mounting equipment, etc). Updating equipment to take account of developments in switching and software. Replace broken switches.	Purchase to include the following: Velcro - at least 3 rolls of hook and loop ACT material (that takes velcro) 5 QED switches Cordless Big Red switch and receiver, Mouse replacement for PC (Rollerplus), Switch box for PC Upgrade for Clicker, OneStep communicator Mains switcher Widgit symbol subscription (1999)	60 20 50 200 250 30 95 50 50 Estimated total: 1200
	Where necessary, explore sources of funding for more expensive items for individual pupils.	Headteacherto explore funding for equipment when necessary.	
To esure CAT equipment is maintained in good working order	External technician to provide technical support.	Headteacher to continue to explore funding for technical support.	
		Simple repairs and maintenance, troubleshooting and checking equipment on arrival by the technician.	
		To send faulty items back to the supplier if economically viable.	
Use of digital camera and scanner to produce personalised communication and	To develop the use of digital photog- raphy and scanned images in per- sonalised teaching and learning	CAT to know how to use digital camera and scanner.	Time
early literacy material	materials and record keeping.	Other members of staff to be trained.	
		Produce materials. Purchase of consumables.	Ink cartridges (black and colour), glossy paper
Continuity and sharing good practice	Discuss proposed software use and communication systems with receiving school before devising new system if pupils are in top Junior class.	Continue joint CAT meetings.	Meeting time for 3 CATs
Therapy support: To strengthen links with the physio team	Advice and support from pupil's physiotherapist before, after and, where possible, during a CAT assessment.	Make changes to CAT information- gathering form to invite specific com- ments from other professionals re positioning, hand function etc.	
	To enable pupils to take an active part in communication, eating, drinking and the curriculum.	All children with AAC needs to have suitable seating with suitable trays.	
	8	Physio Dept to tell CAT when children have changes to seating and seek information prior to the date.	
To seek support from the Occupational Therapist	Advice and support an Occupational Therapist before, after and, where possible, during a CAT assessment.	Ascertain referral system to OT service.	

Appendix 5: Assessment

Assessment is essential to ensure that the most appropriate equipment is obtained for an AAC user. This is no different from ensuring adequate assessment for a wheelchair. However, assessment for AAC equipment should be at least multidisciplinary, and ideally interdisciplinary, with the AAC user and his family involved in the decision-making process. The following areas need to be considered as part of the assessment:

· Medical details

Diagnosis, prognosis and medication will affect the child's ability and performance, and therefore the suitability of different communication systems. Information can be gleaned from medical notes and through discussion with parents/carers, therapists and medical staff.

Motor skills

The child's access to an AAC system will depend on the range, consistency, control and strength of individual movements. The occupational therapist and/or physiotherapist should coordinate the assessment of these aspects.

· Seating and positioning

It is important to establish correct seating and positioning for the child in order to make the best use of available movements. The occupational therapist and/or physiotherapist should coordinate the assessment of this.

Visual skills

As many AAC systems will involve the use of graphic symbols or text, it is important to assess the child's visual perception and acuity in order to make decisions about size, style, amount and colour of symbols. This may be coordinated by medical personnel or the teacher with special responsibility for visual impairment. An occupational therapist may be consulted regarding perceptual deficits.

Auditory skills

It is important to find out how efficiently the child is receiving auditory input, and whether auditory skills can be used to assist access to an AAC system. This may be coordinated by medical personnel or the teacher with special responsibility for hearing impairment.

Cognitive skills

It is important to assess the cognitive level at which the child is functioning, and to assess the rate at which that development may take place. The child's teacher will be able to give detailed information about the child's performance in classroom tasks, and the psychologist may be consulted for specific information.

· Communication opportunities

Opportunities for communication will depend on the home and school environment and on the effectiveness of communication partners. This will be coordinated by the speech and language therapist and assessed through observation at school and at home, alongside discussion with class staff and parents/carers.

· Communication skills

These include:

- · the child's level of understanding
- modes of, and success in, expressive communication
- what the child uses communication for
- how he/she interacts socially with adults and peers
- current use of augmentative/alternative communication system(s)

This should be coordinated by the speech and language therapist through formal and informal assessment and observation of the child in various settings, and detailed discussion with parents/carers and class staff.

Appendix 6: Joint funding procedures

East Norfolk

East Norfolk Health Authority funded a three-year research project seeking to address the issue of funding equipment for children with special needs. The 'equipment' referred to included supportive seating, specialist furniture, standing frames, suction equipment, and communication aids. During the project period, a joint management group administered a cash limit fund to purchase equipment which had previously fallen between agency criteria. The joint management consisted of representatives from the local health trusts, social services and an education department. Work on the project and the production of a project report [28] was undertaken by Kathy Parker, a speech and language therapist.

Oxfordshire

Health, education and social services in Oxfordshire have worked together for three years to administer a joint fund for the express purpose of funding communication aids. The budget is approximately £10,000 per annum. There is no annual carry-over of funds.

Kent

Kent County Council has had a joint funding arrangement since 1995. This considers requests for children's equipment which is not clearly identified as the responsibility of education, health or social services.

Appendix 7: Glossary

Sources

The definitions here have been taken from the following books:

Beukleman D and Mirenda P, 1998 Augmentative and Alternative Communication: Management of Severe Communication Disorders in Children and Adults. Second Edition. Paul Brookes

Glennan S & DeCoste S, 1998 The Handbook of AAC. Singular Publishing

Morris D, 1993 Dictionary of communication Disorders. Whurr

Definitions

Aided communication

Communication that requires equipment in addition to the communicator's body.

Augmentative and Alternative Communication (AAC)

Aided or unaided communication modes used as a supplement or an alternative to oral language, including gestures, sign language, picture symbols, the alphabet and devices with synthetic speech.

Communication

Any act by which one person gives to or receives from another person, information about that person's needs, desires, perceptions, knowledge or affective states. Communication may be intentional or unintentional, may involve conventional or unconventional signals, may take linguistic or non-linguistic forms and may occur through spoken or other modes.

Communication environments

The situations in which an individual communicates.

Communicative competence

A complex process reliant on knowledge, judgement and skills in the following areas – linguistic, operational, social and strategic competence.

Communication modes

Refers to all the different ways we communication, eg speech, gesture, facial expression, sign language, symbol use, speech output device.

Communication system

Any single or combination of aided or unaided communication systems.

Dedicated devices

Speech output equipment designed only for communication.

Direct selection

An access method that allows the user to indicate choices directly by pointing with a body part or technology aid to make a selection. It is the most rapid method of selection.

Indirect selection

An input method that involves intermediate selection steps between indicating the choice and actually sending a keystroke or command to a computer or speech output device.

Individual Educational Plan (IEP)

An education plan required by law and developed by the local school team and parents that outlines educational objectives for the student.

Integrated devices

Speech output equipment designed not only for communication but also for other purposes, eg writing.

Linguistics

The study of language, including phonology, morphology, semantics and pragmatics.

Learned helplessness

May occur if an individual is unable to successfully control their environments.

Sign language

A language that uses manual gestures as the communication modality.

Symbol systems

Individualised sets of symbols assembled to form a communication system. Formal symbol systems usually have graphic ways to represent abstract language concepts.

Team working

Multidisciplinary - Team members from multiple disciplines provide services in isolation from each other and perform only those tasks that are specific to their respective disciplines. Team members then meet to discuss results and develop recommendations.

Interdisciplinary - Team members perform only those tasks which are specific to their respective disciplines, but share information with each other and attempt to unify their findings

Transdisciplinary - Team members from different disciplines engage in a high degree of collaboration focusing on holistic goals for the individual, rather than just discipline-specific goals.

Collaborative - An approach that goes beyond the transdisciplinary model which views communication within the user's natural environments, considers the individual and family as central to any process, and integrates natural supports including friends and community members.

Total communication

The use of all possible communication modalities.

Unaided communication

Communication modes that use only the communicator's body. Vocalizations, gestures, facial expression, manual sign language and head nods are examples.

Voice Output Communication Aid (VOCA)

A device that produces speech when items on its display are selected. It may use digitised or synthesised speech and may be a dedicated or integrated device.