Using ICT to Support Students Who Have English as an Additional Language

Guide for EMA Coordinators and Teachers
This comprehensive guide is targeted at Ethnic Minority Achievement (EMA) coordinators and teachers. It focuses on the potential of ICT for enhancing opportunities for the learning and teaching of integrated curriculum language and content.

**Topics Covered in this guide include:**

- Characteristics of learners with English as an additional language (EAL)
- Potential of ICT for supporting the distinctive needs of learners with EAL
- An inclusive learning and teaching environment
- Choosing and using technology
  - Equipment
  - Productivity software
  - Software and websites
- Telecommunications
- Whole school provision
  - Vision and ethos
  - MIS Data collection and administration
  - Role of inclusion staff
  - Learning and teaching materials
  - The learning environment
  - Home school community links and the extended learning environment
- Continuing professional development
- Relevant websites and further reading
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1.0 Introduction

Academies have an educational responsibility to raise standards through innovative approaches to management, governance, teaching and the curriculum; to provide principals and staff with new opportunities to develop educational strategies to raise standards and contribute to diversity in areas of disadvantage; to challenge the culture of educational under attainment and to deliver real improvement in standards. They are expected to play a key part in the regeneration of communities, to help break the cycle of underachievement in areas of social and economic deprivation whether inner cities, suburban or rural areas. Academies are expected to be part of the local family of schools, sharing their facilities and expertise with other schools and the wider community.

Several academies will have a large number of students for whom English is an additional language (EAL). In order for academies to effectively fulfil their educational responsibilities they will need to develop policy and practice which aims to:

- raise the attainment of students with English as an additional language particularly those from underattaining groups
- provide appropriate inclusive education which meets the language and learning needs of students with English as an Additional language.

Students for whom English is an additional language are not a homogenous group. Academies will need to make provision for learners who are at various stages of language development in both their first and additional languages. Some learners may be at early stages of English language development. They may be able to understand and use little or no English and may be from families who have recently arrived in the UK. Primary schools may have assessed these learners at Stage 1 or 2 of English (where LEA assessment systems are based on the Hilary Hester 4 stage scale of English) or at Step 1, Step 2, level 1 threshold or level 1 secure (using the QCA ‘A Language in Common’ scale). Some of these learners may be fluent and literate in their first languages (particularly where they had full prior schooling in their countries of origin) while others may not (particularly where their education has been disrupted).

Other learners may be at more advanced stages of language development. They may have been learning English for a number of years. They may be fluent users of English in most social situations but experience difficulty when required to use age appropriate curriculum related vocabulary and sentence structures. Primary schools may have assessed these learners at Stage 3 of English (where LEA assessment systems are based on the Hilary Hester 4 stage scale of English). They will probably have SATs results at levels below those of their monolingual peers particularly in literacy. Again some of these students may be fluent speakers, readers and writers in their first language while others will not.

The Ethnic Minority Achievement Grant (Standards fund 303) is allocated to academies in line with LEA formula. It can be used to fund specialist staffing; additional management costs; training including cover costs; and learning and teaching materials. It cannot be used for supply cover unless training relates to the development of school provision for students from minority ethnic backgrounds. However, to effectively address their educational responsibilities and create step change academies cannot rely on EMA funding alone.

If learners are to be fully prepared for adult life in a rapidly developing technological environment then educators have a responsibility to not only provide opportunity for the development of students’ technological skills and abilities but also to embrace new technological advancement, find out what the tools of technology can do and ultimately make them work to their full potential. Evidence shows positive effects of using ICT on students’ attainment in almost all the National Curriculum subjects. This document draws on good practice in the specialist field of EAL and aims to provide guidance and support to Academies on ways in which new technologies can be used to provide easier integration of English, first language and curriculum/subject content thus enabling access to and progression through the curriculum for learners who have English as an additional language. It aims to provide the reader with access to information at the point of need and is not intended to be read from cover to cover.

*Where examples of particular suppliers, products, websites or organisations are mentioned in this report this should not be taken to imply that these specific examples are being recommended by Becta Advisory Service.*
2.0 The Language and Learning Characteristics of Students for whom English is an Additional Language

While learners with English as an additional language share many characteristics with those whose first language is English, they also have distinctive needs that differ from those of all learners. These distinctive needs stem directly from the need to acquire an additional language in order to communicate and access the curriculum. They are not special educational needs (SEN), although some learners with EAL may have SEN, and are not met by general ‘good practice’ however well intentioned the practice is.

To meet these distinctive needs academies will need to provide:

- a stress free learning environment
- opportunity to use first language
- ways to access prior knowledge
- language learning in context
- comprehensible input
- comprehensible output.

2.1 Stages of English language acquisition

EAL students are often characterised by their stage of English language acquisition as this strongly influences their learning and appropriate teaching strategies:

**Students relatively new to learning English:** Beginner learners of English will have limited skills in English although they may have well developed first language skills. They may have been living in England for a very short period of time. Their speaking, listening, reading and writing skills in English will be at an early stage of development although there are differences in their skills in each area.

**Students becoming familiar with English:** Typically students at this stage will have increased fluency in spoken English. They are able to understand instructions and conversations and can participate in learning activities if the context is clear. They may have a good command of ‘social talk’ in English but need development of English for formal academic purposes, both orally and in reading and writing activities in the classroom. The students’ facility with ‘playground’ English sometimes misleads teachers into thinking that they are more fluent in English than is the case.

**Students growing in confidence as users of English:** Students at this stage need continuing support to develop their skills as academic readers and writers in English. Students may decode text accurately when reading but need support to process texts at the necessary level of understanding. Errors in writing may occur as a result of the different syntaxes of English and their first language (however, it should be noted that surface errors are not always about language transfer)

**Fluent users of English:** These students will be competent, knowledgeable and fluent users of English and other languages in most social and learning contexts. They may be high attainers and literate in other languages. They will have gained explicit understanding of how more than one language is structured. This can put them at considerable advantage as learners in English lessons.

2.2 Expected rate of progress

During early stages of second language acquisition it is unlikely that learners will attain national curriculum levels in line with peers. Writing levels are often below reading levels, and CAT test verbal scores of more advance learners are often below non-verbal scores (not the case, on average, for monolingual learners).

Ref: ACA/SLee/Jan05/0001
As learners become more fluent users of English the gap should start to close, however, for the learner of EAL in the mainstream classroom, the task of acquiring English and achieving academically is a moving target: while the learner is acquiring English, the curriculum for the peer group is continually advancing (NALDIC). If learners are to ‘close the attainment gap’ they will need to make more than one year’s progress in one year.

Once learners become fully fluent users of English there is every chance that they will outperform their monolingual peers (research indicates positive cognitive outcomes for learners operating fluently in two or more languages).

A number of factors will have an impact on the development of students’ language skills and their ability to apply these skills to their learning across the curriculum. These will include: the age at which they enter the educational system; their previous experience of schooling and literacy in their first language; their knowledge and understanding of languages and the school curriculum; the schools’ response; and the available support for language and learning development at home and at school (NALDIC). EAL students’ previous experience of schooling can be very varied and may include:

- Little or no prior formal schooling: students may be disadvantaged through lack of knowledge and understanding about expectations of learning at school. They may not be literate in a first language so may be learning to read and write for the first time in an additional language. Some students entering KS3 classes may also be asylum seekers and/or have limited or interrupted experiences of schooling
- Some education in the UK or overseas, but with significant gaps in formal schooling: students may require considerable support to consolidate and transfer key English skills
- Experience of different education systems in two or more countries: students may not be used to the culture of the English classroom, however, research has shown that students with four or more years education in their first language are most likely to achieve at (or above) expected levels in the long term
- Full primary schooling (six years or longer) in the UK: students should be as literate and fluent as their peer group, depending on how well their previous education has met their distinctive needs
- Full formal education abroad: students who have received full education abroad are likely to be fluent and literate in a standard language.

(Adapted from ‘Access and Engagement in ICT – Teaching Students for whom English is an Additional Language’ 2002)

2.3 Closing the gap

To enable learners with EAL to close the attainment gap we must ensure access to and progress through the curriculum and English language acquisition through the integration of language and curriculum or subject content (NALDIC). In order for this to be achieved, schools need to provide physical and virtual learning environments that motivate and support the EAL learner’s distinctive needs. This next section will look at some of these needs in more details and explore ways in which ICT can be used to enhance support.
3.0 The Distinctive Needs of Learners for whom English is an Additional Language

3.1 Stress free learning

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Effective provision</th>
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<tbody>
<tr>
<td>Stress can create a barrier to input of any kind, however supportive.</td>
<td>• Full school inclusion</td>
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<td></td>
<td>• A whole school ethos that celebrates cultural and linguistic diversity</td>
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<tr>
<td></td>
<td>• Opportunity to learn without fear of racism or discrimination</td>
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<tr>
<td></td>
<td>• Introduction to routines during induction</td>
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<td></td>
<td>• Teaching input in short bursts</td>
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<td>• Time to respond</td>
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<td></td>
<td>• Opportunity to be silent</td>
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<td></td>
<td>• Opportunity to experiment without fear of making mistakes</td>
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The potential of ICT for enhancing provision

• Creative use of ICT in the classroom can promote inclusion and reflect cultural and linguistic diversity by enabling the learning environment to be extended beyond the physical.
• Learners can showcase and share their work, which can promote cultural diversity, have positive motivational effects and raise self-esteem.
• Up to date information relating to linguistic and cultural diversity can be made accessible to all.
• Errors can easily be reversed encouraging experimentation and reducing anxiety about mistakes.
• Auto correction or feedback (including spell checkers and grammar assistance) can encourage learner development and independence. The best feedback scaffolds the learners’ next move as well as giving praise once a task has been successfully completed.
• Writing can be redrafted without the stress of having to rewrite long paragraphs and material can be revisited as often as necessary.
• Visual timetables familiarise learners with school routines, for example when to bring PE kit.
• Computer games can help to develop study-buddy friendships.
• Learners can work individually or with others at their own pace and return to a task at a later date. (software that has the facility for learner controlled repetition built in is particularly supportive).

3.2 Use of first language (L1)

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Effective provision</th>
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<tbody>
<tr>
<td>Use of first language enables learners to access the curriculum</td>
<td>• Opportunity to interact, read and write for curriculum related purposes using L1</td>
</tr>
<tr>
<td>Linguistic concepts are more easily acquired in the first language</td>
<td>• Bilingual staff support curriculum access</td>
</tr>
<tr>
<td>Linguistic concepts are easily transferred</td>
<td>• Access to bilingual word lists and dictionaries</td>
</tr>
<tr>
<td>Language acquisition is more rapid when both languages are encouraged</td>
<td>• Multilingual notices, labels and displays</td>
</tr>
<tr>
<td>Bilingualism can have a positive affect on cognitive ability</td>
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<tr>
<td>Bilingual approaches enhance metalinguistic awareness</td>
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</tbody>
</table>
The potential of ICT for enhancing provision

- Projects requiring the use of computers, cameras, video recording and sound recording equipment can provide excellent opportunities for learners to work collaboratively with other L1 speakers.
- First language websites aid understanding and bring other languages into the classroom
- Email / chat rooms offer a multitude of possibilities for learners to liaise with other L1 speakers.
- Online translation facilities or translation options in word-processors can be used by learners who are literate in their first language to facilitate understanding and build bridges between languages
- Online translation facilities can be used by teachers to create dual language teaching and learning materials as well as notices, classroom labels, displays, etc. (see sites/software: translation)
- Multilingual word processing enables learners to write in the first language. Scanners enable non-European fonts to be incorporated into writing where multilingual word-processing is not available.
- Bilingual multimedia stories bring paper based bilingual books to life. They scaffold the learning of students from minority communities and offer possibility to increase the awareness of language of all learners. Edwards, Monaghan and Knight in their paper ‘Books, Pictures and Conversation: Using Bilingual Multimedia Storybooks to Develop Language Awareness’ 2000 outline how children compared first and second languages and predicted the meaning of words in the second language. They were found to make observations regarding differences between languages such as the number of words in a sentence, word order, absence of pronouns, positions of subject and verb elements and order of adjectives. They used similarities between languages to aid understanding.

3.3 Accessing prior knowledge

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Effective provision</th>
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</thead>
<tbody>
<tr>
<td>The different cultures, history, knowledge, experiences, traditions learners bring need to be acknowledged and build upon if understanding of new concepts and situations is to be developed</td>
<td>Opportunity for learners, including those at early stages of English, to share knowledge</td>
</tr>
<tr>
<td>Learning involves integrating new information into an existing mental model</td>
<td>Differentiated learning opportunities that build on learners’ prior knowledge, skills and experiences</td>
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<tr>
<td></td>
<td>Direct teaching of basic skills and classroom procedures, such as, roles in group work where learners have had no prior schooling or are unfamiliar with the UK education system</td>
</tr>
</tbody>
</table>

The potential of ICT for enhancing provision

- KWL grids provide students with a structure for learning (what I Know, what I Want to know, what I have Learned). Grids can easily be created through the use of word processing, database and/or spreadsheet facilities and shared with the class through the use of digital projection technology.
- ICT gives learners immediate access to richer source materials that draw on the previous learning and experiences. Information and images from a variety of cultures can be found on the internet and on CD-ROM. These can be easily integrated into teaching using interactive whiteboards, and downloaded to create collaborative learning activities for use away from computers.
- Some programs track progress and print progress reports. Such reports provide assessment information and help to inform future planning and differentiation.
- It has been said that the ‘digital divide’, a catch phrase for a set of inequalities including ethnicity and socio-economic status, will disappear over the next decade as the provision of ICT at school, in the home, from community centres, and via portable computing devises, becomes increasing more widespread and easily available (Ben Williamson ‘Bridging or Broadening the Digital Divide’), however, for the time being we need to take into consideration the fact that learners arriving from other cultures may not have used computers before. For these learners it will be necessary to teach basic navigational and inputting skills, how to find accented characters necessary for their first language and provide icon alternatives to menu commands which can be difficult to understand. It is important that new technology should not get in the way of learning.
- Equally it needs to be considered that learners may be arriving from technologically advanced cultures and consequently fully able to maximize the potential of ICT in their learning. 'It is easy to underestimate what pupils can achieve in ICT, simply because they are new learners of English. The expectation should be that they progress in their learning at the same rate as other pupils of their age' (DIES KS3 National Strategy Access and Engagement in ICT).
### 3.4 Language learning in context

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Effective provision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In class learning and teaching opportunities promote inclusion</strong></td>
<td><strong>Inclusive in-class support</strong></td>
</tr>
<tr>
<td>Language that is acquired in meaningful situations leads to fluent communication</td>
<td>All schools have a responsibility to provide differentiated inclusive in-class teaching and learning opportunities in all subject areas, from the point of admission, for all learners who have EAL.</td>
</tr>
<tr>
<td>Real situations enable language teaching at the point of need</td>
<td><strong>Induction support</strong></td>
</tr>
<tr>
<td>Decontextualised language learning has been shown to be less effective</td>
<td>Learners with little or no English, previous education and/or literacy skills may have needs that cannot be met entirely through inclusive class support.</td>
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<tr>
<td>The curriculum provides access to higher order language functions</td>
<td>Such learners may benefit from short periods of withdrawal support where basic language learning is integrated with curriculum content.</td>
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<tr>
<td>Ability to use curriculum related language is crucial to educational success</td>
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#### The potential of ICT for enhancing provision

**Inclusive in-class support**
- Up to the present time there have been more subject-specific ICT resources available to teachers in English, mathematics, science and ICT than in any other subjects, consequently more use is made of ICT in these subjects. ‘ICT and Attainment: A review of the research literature’ Cox et al, identifies the need to investigate the possibilities and integrate the use of a whole range of technological equipment, software and sites into subject teaching across the curriculum. The section of this guidance on ‘Software and sites: Catalogues and Directories’ offers a useful starting point.
- Productivity software such as word-processing, multimedia authoring, can be used to create differentiated learning and teaching materials for use across all subject areas (see Productivity Software).
- School websites and intranets provide a real context for learners to write and showcase their work.

**Induction Support**
- Wherever possible use age appropriate software and computer generated resources that link language learning with curriculum content.
- Digital technology can be used to create a range of resources that support basic language acquisition, for example, pictures of the classroom/subject areas could be taken with a digital camera and combined with classroom labels produced through the use of a word processing program to create games.
- There are a number of software programs available on the markets that support basic language and literacy development (see Software). Learners can work through these at their own pace, start where they previously left off, repeat sections, etc. A beginner pupil can usefully spend a little time, 30 minutes for example, every day on language learning activities on the computer. It is useful to have a laptop connected to the network available as well as headphones and a microphone. Academies specialising in languages may be installing dedicated language laboratories, which, in addition to the listening, recording, playback and dialogue facilities of traditional laboratories also include digital sound, images and internet access.

### 3.5 Comprehensible input

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Effective provision</th>
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<tbody>
<tr>
<td>Learning occurs when messages are understood</td>
<td>Opportunity needs to be planned in advance for modelling and extending the use of content language:</td>
</tr>
<tr>
<td>Messages are understood when there is comprehensible input</td>
<td>- Vocabulary,</td>
</tr>
<tr>
<td>Learning is faster when comprehensible input is just beyond the level of competence</td>
<td>- Language structures / grammar</td>
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<tr>
<td></td>
<td>- Language functions</td>
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</tbody>
</table>
EMA and subject specialist teachers working in partnership provide additional opportunities for:

- Planning
- Delivery,
- Record-keeping,
- Assessment
- Review

Language and curriculum learning objectives need to be modelled using a range of strategies such as:

- Visual aids
- Demonstration
- Gestures and facial expression
- Repetition
- Paraphrasing
- Open ended questions
- Shared writing
- Picture/first language wordlists and displays

The potential of ICT for enhancing provision

Planning
In selecting technology for use during whole class teaching and group activities it is essential that planning take into consideration the distinctive needs of EAL learners. Teachers will need to:

- become familiar with the software - greater familiarity enables more effective learning support
- assess the potential for differentiating learning outcomes
- identify key language: subject specific vocabulary, language structures/grammar, language functions
- consider how key language will be introduced, modelled, extended and scaffolded
- identify whether the entire program or selected parts will be used
- consider whether the program is suitable in terms of academic level, stage of language development, cultural references and/or age. While KS1 and KS2 software may provide basic level vocabulary and sentence structures for early stage learners it is designed for learners aged between 5-11 years. Using such software with KS3 and KS4 learners can be demeaning and demotivating
- select programs with screen presentation and navigation that is not too cluttered or confusing for early stage learners with little previous experience of using ICT. Picture indexes/menu systems and buttons provide easy navigation for learners who may find wordy menu commands difficult to understand, and who may not have sufficient ICT skills or confidence to explore the software in an unfamiliar language
- prepare support materials: download visuals, bookmark web sites, prepare Clicker grids, use on-line facilities to translate wordlists, create writing frames, modify subject information and printed materials
- consider how whiteboards can be used with the whole class to model the use of new language, aid understanding of concepts and familiarise learners with ICT operational skills
- discuss ‘roles’ with the EAL specialist where teaching will be delivered in partnership in order that opportunities for using technology to model curriculum language and content may be maximised
- organise groups for computer-based activities that enable early stage learners to work with other first language speakers and also to hear good models of English. Consider group dynamics. Groups should be no larger than three. Plan time to teach and reinforce rules and roles for group work.

Visual aids
Visual aids play an essential role in helping EAL learners develop language and access curriculum content. ICT can be used to generate a wide range of visual support materials and graphic organisers including: maps, diagrams, charts, tables, semantic webs, graphs, time-lines, outlines of causal sequences, videos, computer graphics, web pages, etc. (*The Distinctiveness of English as an Additional Language* NALDIC).
For early stage learners ICT is particularly effective in providing pictorial support for learning basic vocabulary such as classroom equipment, body parts, clothes, colours, food, prepositions etc. It can be used to make labels, flash cards, picture dictionaries, worksheets and many of the collaborative learning activities mentioned in this guidance (see comprehensible output). Large picture banks of clip art are readily available on the Internet and on CD-ROM. Images can also be created using digital cameras or scanners.

For more advanced learners of English, animation, photographic and 3D real life images enable abstract concepts to be exemplified. Multimedia simulation programs support understanding through the integrated use of images, text and sound.

3.6 Comprehensible output: promoting talk

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Effective provision</th>
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<tbody>
<tr>
<td>• Talk is vitally important in developing English and ensuring full access</td>
<td>Learners need to interact, read and write using:</td>
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<td>to the curriculum</td>
<td>• Social language</td>
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<tr>
<td>• Interaction with competent speakers of English provides one of the</td>
<td>• Academic language</td>
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<tr>
<td>strongest motivational forces for learning</td>
<td>• ICT specific language</td>
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<tr>
<td>• Talk enables learners to be conscious of their language use, and to</td>
<td>• First language</td>
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<td>process language at a deeper level</td>
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<tr>
<td>• Interaction enables learners to use and practise new language</td>
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<tr>
<td>• Grammatical structures are acquired naturally in a predictable order</td>
<td>Learners need to work collaboratively across a range of social contexts:</td>
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<tr>
<td>when the learner is engaged in communication</td>
<td>• Whole class</td>
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<tr>
<td>• Competent speakers provide fluent models of language use</td>
<td>• Small groups</td>
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<tr>
<td></td>
<td>• Peer-peer partners</td>
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<tr>
<td></td>
<td>• Teacher-learner</td>
</tr>
<tr>
<td></td>
<td>Learners need to work in groups where they can:</td>
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<tr>
<td></td>
<td>• Hear good models of English spoken</td>
</tr>
<tr>
<td></td>
<td>• Use their first language</td>
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<td></td>
<td>• Work at their cognitive, level (ability groups should be regularly reviewed as</td>
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<tr>
<td></td>
<td>EAL learners, with the right support, will make more than one year’s progress in</td>
</tr>
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<td>one year)</td>
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The potential of ICT for enhancing provision

The following examples of off-computer activities can be used to effectively promote subject specific talk across the curriculum. Each activity can easily be prepared and carried out using ICT (see Productivity Software). If the academy is investing in a Virtual Learning Environment (VLE), tools for creating activities should be available as part of the VLE. Ready made collaborative learning materials can be downloaded from a large number of sites (see Software and websites: software collections and directories) including: The Collaborative Learning Project http://www.collaborativelearning.org.

Once created, activity formats can be saved and modified for use subsequent lessons:

• sequencing pictures and/or text: events in a story/history, science processes
• Lotto: matching pictures with pictures, pictures with text
• ranking and ordering: statement and/or pictures
• statement sorting: true/false, character descriptions
• barrier games
• transferring information from one format to another.

Research suggests that learners working in groups of three at the computer work collaboratively for longer. More than three can lead to exclusion and discomfort.

The Spoken Language and New Technology (SLANT) project undertaken by research team from the Open University and University of East Anglia looked at quality of talk during a computer assisted collaborative learning activity. Of the different types of talk observed it was found that ‘exploratory talk’, where hypotheses are proposed, objections made and justified, and new relevant information is offered,
was found to be associated with good group relations and problem solving, and to be educationally the most effective type of conversational sequence.

Research from the ‘Thinking Together’ team: developing speaking and listening, and thinking skills through the use of ICT http://www.thinkingtogether.org shows how ‘exploratory talk’ can be encouraged within group work at the computer.

Over a series of nine off-the-computer lessons the following skills were taught to a group of pupils:

- listening
- sharing information
- co operating;
- critical argument for and against;
- discussing alternative ideas
- giving and asking for reasons;
- strategies for inviting contributions from all members of the group.

When the phrase ‘talk together’ was used learners were taught to cue exploratory discussion according to the following ground rules:

- all relevant information is shared
- the group seeks to reach agreement
- the group takes responsibility for decisions
- reasons are expected
- challenges are accepted
- alternatives are discussed before a decision is taken
- all in the group are encouraged to speak by other group members.

Through the teaching of these ground rules it was possible to move pupils from an IRF approach: Initiation (computer), Response (learner), Feedback (computer), towards an IDRF structure where D represents pupil discussion using exploratory talk. Instead of reacting immediately to the computer prompt learners discussed their responses.

It was also found that the following software interface design features more effectively promoted exploratory talk:

- evidence for use in reasoning about choices displayed on the screen where children can point
- choices presented in a motivating narrative
- problems sufficiently complex to benefit from being analysed through reflection and discussion
- a simple interface with multiple choice options (rather than typed input)
- an avoidance of any encouragement towards turn-taking.

The contribution of the teacher in scaffolding activities at the computer is crucial for determining students’ use of language. By working across a number of groups the teacher can both scaffold the use of curriculum related vocabulary and assist learners in applying strategies that develop self-reliance.

Research provides clear evidence that advanced EAL learners often experience particular difficulties with writing: ‘Writing in English as an additional language at KS4’ (DfES: Cameron 2003). ICT can support such students in moving from oral to written language, for example, through the use of:

- supportive word processing software, such as Clicker, which combines words, pictures and sound to create writing frames (grids).
- Interactive CD ROMS which enable learners to record responses and/or choices orally or in writing
- email, local network links, user groups, chat lines and video conferencing facilities which provide opportunity for learners to communicate in writing with proficient speakers of English and/or their first language across the world.

By marking written work at the computer the teacher can demonstrate how to improve work in a way that is much clearer than if it had been marked on a handwritten script or corrected by the computer alone. Oral feedback can be used to move learners towards the forms of language used in writing.
4.0 Choosing and Using Technology: Equipment

4.1 Computers

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Further Information</th>
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</thead>
<tbody>
<tr>
<td>Desktop computers</td>
<td>The Becta paper on Tablet PCs provides technical information and many useful links to Tablet PC specific information, software, case studies, news, reviews, comments, manufacturers and sites: <a href="http://www.becta.org.uk/subsections/foi/documents/technology_and_education_research/tablet_pc.doc">http://www.becta.org.uk/subsections/foi/documents/technology_and_education_research/tablet_pc.doc</a></td>
</tr>
<tr>
<td>Laptop</td>
<td></td>
</tr>
<tr>
<td>Tablet PC</td>
<td></td>
</tr>
</tbody>
</table>

Computers can generally be accessed in the school ICT suite and/or learning resource centre. Small clusters of computers, linked to the network, in subject specific areas can also for accessing resources.

Laptops and tablet PCs offer greater flexibility for use in ordinary classrooms. They can link to the network using wireless connectivity or data points enabling learners to use ICT while retaining access to subject specific support materials and artefacts displayed in the subject classroom. The Tablet PC is claimed to combine the power of a laptop, the mobility of a personal digital assistant (PDA) and the ease of use of a pen and paper. Although similar in appearance to the laptop, it is quite different in terms of functionality. The most noticeable difference is that there is no keyboard, the user operates the Tablet PC through a digital pen which is used to write on the touch sensitive screen. Using the Tablet PC students can make handwritten notes in their first language during lessons and save these in digital ink format for future reference. This facility may prove helpful for EAL learners who are not yet confident in writing in English but who are literate in their first language, particularly where their first language requires use of a non-Roman script. Where English is used this can easily be converted into typed text for use in other applications.

Students new to schooling may not have used computers before. For these learners and those at early stages of English try to select programs with screen presentation and navigation that is not too cluttered or confusing. Symbol alternatives to menu commands and buttons provide easy navigation for learners who may find wordy menu commands difficult to understand, and who may not have sufficient ICT skills or confidence to explore the software in an unfamiliar language. Symbol alternatives can help learners use the computer independently.

Learners will need to be taught basic navigational and inputting skills, where to find accented characters necessary for their first language, and the icon alternatives to menu commands. It is important that new technology should not get in the way of learning (see Alternative access devices).

Teachers need to be especially careful that computers and programs are not used as virtual baby sitters because they are unsure how to respond to the EAL learner's needs.

4.2 Alternative access devises

<table>
<thead>
<tr>
<th>Alternative Access Devices</th>
<th>Further Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overlay keyboards</td>
<td>Training materials are freely available at : <a href="http://www.inclusive.net/resources/units/units.shtml">http://www.inclusive.net/resources/units/units.shtml</a></td>
</tr>
</tbody>
</table>

The overlay / concept keyboard is a touch sensitive keyboard covered with an overlay. This can be used instead of, or in conjunction with, the QWERTY keyboard. The idea is for the teacher to divide the concept keyboard into areas (buttons) and then assign a word, a sentence, a picture or a sound to each. By pressing a key or combination of keys the computer is instructed to respond in a manner previously assigned e.g. words appear on the screen and are read out simultaneously. Concept keyboards are used with overlay sheets.

Ref: ACA/SLee/Jan05/0001
It is hoped that students will learn ICT skills at the same time as becoming more fluent in English, however, it is important in the early stages of acquiring English that learning to use the keyboard and mouse does not get in the way of learning. Overlay keyboards can provide helpful support for such learners. Overlays can be bought or made. They can include full colour pictures, photographs or even real objects, and can facilitate levels of presentation that could otherwise not be achieved by the early stage EAL learner. First language overlays can help early stage learners write in an unfamiliar script and develop new vocabulary. Overlays combining a mixture of pictures, English and first language can be used to differentiate language used in activities. As ability to use and understand English develops, new overlays can be produced containing more written English and fewer pictures and L1 words.

4.3 Projection technologies

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Further Information</th>
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</thead>
<tbody>
<tr>
<td>Data projector</td>
<td>‘Using interactive whiteboards in secondary schools’</td>
</tr>
<tr>
<td></td>
<td>‘How to use your whiteboard effectively’ provides a list of practical tips adapted from the findings of the REVIEW project based at the University of Hull and funded by Nesta (National endowment for Science, Technology and the Arts).</td>
</tr>
</tbody>
</table>

Data projectors are used to project information from a computer or laptop onto a screen. An interactive whiteboard is a touch-sensitive projection screen that is able to do all that a data projector can do with the added advantage that individuals can interact with it directly, for instance, learners can touch and drag items across the screen.

Data Projectors and whiteboards enable the teacher to more effectively model the use of new language and introducing complex curriculum related concepts and tasks within a shared context. Essentially, what is achievable on a computer is achievable large scale with the whole class, for instance:
• relevant sites can be bookmarked and accessed immediately if needed to support understanding
• texts can easily be manipulated to provide a focus on the way language is used
• key words/sentences can be dragged from the text into prepared tables to make teaching points explicit
• previous examples of work can be saved and brought to view as a means of focusing on form and function
• videos and multimedia presentations can be used to contextualise the learning
• flipcharts can be revisited and picture glossaries can be shown alongside text
• organisational maps of learning can be developed
• processes can be repeated as many times as required using back and forward menu commands
• translation software and sites can be used to make information accessible to early stage learners

The use of a whiteboard means learners can really focus on texts without being slowed down or distracted by the mechanics of physically manipulating the words. Learners who are unfamiliar with the Roman script find typed text much easier to read than handwriting and also benefit from a font that can easily be seen at the back of the classroom (for example, Arial or Comic Sans).

Funding for interactive whiteboards is a real opportunity to integrate ICT into learning and teaching. In London, the expansion scheme aims to enable all London Secondary schools to have whiteboards in all classrooms used for at least one of the three core subjects – English, mathematics and/or science. Suppliers will deliver operational training. Pedagogical training will be delivered by suppliers where this is offered as part of the purchase deal, and by London’s City Learning Centres (CLCs).
4.4 Cameras

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Further Information</th>
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<tbody>
<tr>
<td>• Digital</td>
<td>• Using digital cameras</td>
</tr>
<tr>
<td>• Disposable</td>
<td><a href="http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=681">http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=681</a></td>
</tr>
</tbody>
</table>

Cameras can be used to create a multitude of resources that support the development of academic language:
- collaborative learning resources: games, flash cards (school environment, subject equipment, etc.)
- books: myself, subject specific information, school visits, etc.
- picture dictionaries
- visual timetables to inform students and parents of school routines
- photographs of practical activities can be later used to consolidate language and content learning.

Cameras can also be useful in gathering evidence for assessment purposes. Pictures of practical activities can be used where learners are unable to complete a written formal assessment task.

Disposable cameras could be given to students visiting their home country. Photos can be scanned, put onto a CD and incorporated into learning and teaching materials.

4.5 Scanners

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Further Information</th>
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</thead>
<tbody>
<tr>
<td>• Scanner</td>
<td>• Requires text or image scanning software</td>
</tr>
<tr>
<td>• Pen scanner</td>
<td>• Wizcom Pen Scanner</td>
</tr>
</tbody>
</table>

A scanner enables information from non-digital sources such as text in non-Roman fonts; learners’ own drawings; and photographs from non-digital and/or disposable cameras to be added to computer based documents and multimedia presentations.

A pen scanner displays individual words scanned from a piece of text in a small window and provides options for translation and/or dictionary support. It can be useful in supporting more advanced EAL learners in accessing age appropriate texts.

4.6 Video

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Further Information</th>
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</thead>
<tbody>
<tr>
<td>• Digital video disc (DVD)</td>
<td>• Using video clips <a href="http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=686">http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=686</a></td>
</tr>
<tr>
<td>• Digital video (DV) camera</td>
<td>• Digital video pilot scheme <a href="http://www.Becta.org.uk/research/research.cfm?section=1&amp;id=532">http://www.Becta.org.uk/research/research.cfm?section=1&amp;id=532</a></td>
</tr>
</tbody>
</table>

The DVD is the successor to the CD-ROM and is able to store much more information. DVDs and DV film can be used with data projectors to support whole class teaching and assemblies. Films or clips can help in contextualising culturally and historically unfamiliar topics and literature.

Digital video cameras can be used to record practical activities such as field trips, experiments, role-play activities for inclusion in a learner’s portfolio where a written outcome may not be possible, for example where learners are at early stages of English or have limited literacy skills due to gaps in prior schooling.
In 2002 Becta commissioned the British Film Institute (bfi) to undertake an evaluation of the Digital Video (DV) pilot scheme which involved students making and editing films for subject based purposes. Findings show that it can increase students’ engagement with the curriculum, promote and develop a range of learning styles, and motivate and engage a wider range of students than traditional teaching methods, so providing greater access to the curriculum. Teachers’ own monitoring suggested that the use of DV stimulates and supports the development of other skills, such as problem solving, negotiation, thinking, reasoning and risk-taking. They identified that editing done in groups provided a forum for discussion that was purposeful and pupil centred and that it was the talk generated by using DV that most surprised the teachers involved. The report states that DV in many ways bridges different worlds for students, school and home, and seemed to cross social boundaries and class barriers.

As a communications medium DV can be used to facilitate videoconferencing (see Telecommunications).

4.7 Audio

<table>
<thead>
<tr>
<th>Equipment</th>
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<tbody>
<tr>
<td>• CD player</td>
</tr>
<tr>
<td>• Minidisk</td>
</tr>
<tr>
<td>• Microphone (omni/unidirectional)</td>
</tr>
<tr>
<td>• Headphones</td>
</tr>
</tbody>
</table>

Audio facilities enable learners to listen to texts in English and/or their preferred language using headphones and record themselves reading texts. Comprehension is greatly supported when the learner is able to hear intonation, pronunciation and word-stress while following the text on the page. Listening to pre-recorded material to accompany fiction and non-fiction is a supportive practice for independent reading. There is a range of pre-recorded material on the market including abridged stories and shortened texts with restricted vocabulary.

The facility to record sound is needed, for example, if teachers/students are making their own talking books. Sound can be recorded directly onto a computer (desktop or laptop) as long as a good quality microphone is available and the computer includes suitable sound capability.

Recordings of learners interacting with fluent users of English can provide valuable evidence to support assessment. This information can be used to support both assessment of learning, enabling EMA specialists to allocate a stage/level of language acquisition for formal assessment and reporting purposes, and also assessment for learning, to inform future planning and differentiation of learning and teaching.
5.0 Choosing and Using Technology: Productivity Software

5.1 Word processing

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Microsoft Word</td>
</tr>
<tr>
<td>• Star Office (open source software)</td>
</tr>
<tr>
<td>• Advantages of using a word processor</td>
</tr>
<tr>
<td><a href="http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=693">http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=693</a></td>
</tr>
</tbody>
</table>

Early stage learners

• Familiarises learners with the English script.
• Facilitates writing where learners may be struggling with the mechanics of using the English script.

More advanced learners

• Errors can easily be reversed encouraging experimentation and reducing anxiety about mistakes.
• Writing can be redrafted without the stress of having to rewrite long paragraphs.
• Tools for manipulating text such as ‘search and replace’ encourage learners to extend their use of vocabulary.
• Spelling and grammar checkers draw attention to error in a non-threatening way.
• Thesaurus and dictionaries provide vocabulary extension - alternatives may be more closely related to the learner's first language and thus facilitate understanding.
• The Microsoft ‘comment’ tool allows comments to be written at selected points in the text.
• The Microsoft ‘track changes’ facility allows errors to be highlighted and alterations suggested.

5.2 Supportive word processing

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clicker 4</td>
</tr>
<tr>
<td>• Using Clicker 4 for EAL teaching: case studies <a href="http://www.cricksoft.com/uk/ideas/teaching_EAL/index.htm">www.cricksoft.com/uk/ideas/teaching_EAL/index.htm</a></td>
</tr>
<tr>
<td>• ‘English for Beginners : Clicker 4 grids to support students new to learning EAL ’ CD ROM - Coventry City Council Tel: 024 7671 7800</td>
</tr>
<tr>
<td>• Co Writer</td>
</tr>
<tr>
<td>• Penfriend XP: predictive text</td>
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</tbody>
</table>

Clicker is a tool for creating colourful writing grids that combine words, phrases, images and sound. When the learner clicks on a button in the writing grid the word or phrase is read back to them. When a full stop is inserted the whole sentence is read back. The grids enable subject specific writing to be differentiated to the learner’s ability, and support the development of curriculum related language. It has a library of over 1,000 curriculum related pictures and words which can be added to at any time.

Clicker is particularly supportive of early stage learners and students with no previous literacy skills. Students are not held back by a need to develop vocabulary, spelling, knowledge of sentence structure and word order before moving into writing. They can develop understanding of curriculum related concepts while developing ability to use English.

A bank of grids created by teachers working with EAL students is available for free download from the Crick Software site. In order to use the grids it is necessary to have the Clicker software installed. Alternatively grids can be purchased or created using images imported from the internet or a digital camera.

Ref: ACA/SLee/Jan05/0001
Coventry EMA service has produced a CD of Clicker 4 grid to support learners at early stages of English in KS1, KS2 and KS3. The resource is divided into six themes: school, out and about, food, nature, numeracy and literacy. Each theme includes a series of activities, which build up from vocabulary practice to simple writing activities that can be saved and printed. The aims of the resource are to:

- provide practical activities for students at early stages of learning English as an additional language
- provide opportunities for students to practise English vocabulary and simple structures
- encourage the use of ICT as a learning tool for all students.

Predictive text programmes predict the next word to be written, based on what has been written before and produce a list of options. Penfriend XP speaks predictions and typed text. It is unlikely that predictive text will be particularly helpful to early stage learners due to the decontextualised nature of the support provided, however, it may be helpful in extending the vocabulary of more advanced EAL learners and in providing support where literacy lags behind that of oral fluency.

5.3 Multilingual and bilingual word processing

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software providing a range of different scripts:</td>
</tr>
<tr>
<td>• Microsoft Office/ Windows 2000</td>
</tr>
<tr>
<td>• Global Office</td>
</tr>
<tr>
<td>• Global Writer 3</td>
</tr>
<tr>
<td>Specialist software:</td>
</tr>
<tr>
<td>• Indian subcontinent: ‘Ileap’ and ‘Leap Office’</td>
</tr>
<tr>
<td>• Bengali: ‘Executive’ <a href="http://www.banglaword.com">http://www.banglaword.com</a></td>
</tr>
<tr>
<td>• Urdu: ‘In Page’</td>
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</tbody>
</table>

Some benefits of multilingual word processing, issues to consider before buying software, and where to go for more information (Jim Anderson -Goldsmith College): [http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_2&id=794](http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_2&id=794)

Lingua Language Services will discuss needs, budget and provide training: [http://www.lingua-uk.com](http://www.lingua-uk.com)


Yamanda Language Centre [http://babel.uoregon.edu/yamada/fonts.html](http://babel.uoregon.edu/yamada/fonts.html)

Multilingual/bilingual word processing enables learners with EAL to write in their first language, raises the status of minority languages and promotes inclusion. It can be used for a wide range of purposes:

- Learners can write their names accurately.
- Teaching materials can be prepared and undertaken by learners’ in their first language.
- Dual language texts and multimedia talking books can be created as part of coursework.
- Dual language labels can be created for subject based equipment and areas within the school.
- Letters and other documentation can be translated for parents.
- ICT can be incorporated into first language writing workshops and Community language classes.

Edwards, Monaghan and Knight in their paper ‘Books, Pictures and Conversations: Using Bilingual Multimedia Story books to Develop Language Awareness’ 2000 cite Chana et al (1998) describe how ‘attendance at Urdu club in a multilingual primary school increased from six to twenty two (including six monolingual English speakers) when an Urdu word-processing program was introduced’.

A separate keyboard is generally not necessary. Most software packages provide the option for alternative keyboards to be displayed on screen and/or provide stickers that can be placed over the keys of a standard keyboard.

Ref: ACA/SLee/Jan05/0001
Where a large number of languages are to be supported it is cost effective to consider software that provides basic access to a wide range of European and non-European scripts (script quality may vary):

- Microsoft Office 2000 and Windows 2000 have free script download capability. Scripts work within the whole of Office, Internet Explorer 5.01 or greater, and Outlook Express. For simple scripts, such as Arabic, you can simply change settings in Regional Options of Windows (you need Administrator privileges for this), for more complicated scripts, such as Chinese and Japanese, you need to download the Microsoft Input Method Editor (5.02: http://www.microsoft.com/windows/ie/downloads/recommended/ime/install.asp or Office XP: http://www.office.microsoft.com/assistance/2002/articles/odownloadinputmethodeditors.aspx )

- Global Office and Global Writer 3 are commercial programs that cover over 100 languages and are easy to use.

Additionally, specialist software can be bought for individual languages. Specialist software will often provide better script quality and ease of use for individual scripts, for example in the way that characters join together and/or directionality. It may provide opportunity for clip art to be added and include additional features, such as, online assistance with dictionaries, spell-checkers and grammar. It is, however, expensive, the need for quality needs to be balanced against budget. Rather than purchasing specialist software for each language, it may be better to obtain general software that covers a range of scripts and then purchase individual scripts where better quality is required. Examples of packages for specific languages include: ‘Ileap’ and ‘Leap Office’ for languages of the Indian subcontinent; ‘Executive’ and http://www.banglaword.com for Bengali; and InPage for Urdu.

The Community Languages Project http://languages.londonmet.ac.uk/CALL/nonLatin/docs/main.htm has produced material that can be used to help teachers of languages that do not use the Latin alphabet. They have developed the ‘GISMO’ authoring package for use with Arabic, Punjabi and Tamil and are planning to produce a version for Urdu. There is a considerable amount of on line material for Arabic and some material for Tamil. Basic text-editing software for Arabic and Punjabi can be downloaded.

### 5.4 Supportive reading software

<table>
<thead>
<tr>
<th>Example Product</th>
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<tbody>
<tr>
<td>E-lective</td>
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</table>

Supportive reading software can vary in sophistication from word recognition to reading comprehension. One example is ‘E-lective’ a programme being developed by Jim Cummins (Department of Curriculum, Teaching and Learning of the University of Toronto). The programme is targeted at advanced learners of English and aims to support learners in accessing age appropriate academic language. Facilities include spoken text, bilingual dictionaries, individualised cloze activities, individualised tests, and performance summaries for assessment and progress monitoring purposes.

### 5.5 Desktop publishing (DTP)

<table>
<thead>
<tr>
<th>Product Examples</th>
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<tbody>
<tr>
<td>Microsoft Publisher</td>
</tr>
<tr>
<td>PageMaker</td>
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</table>

DTP software enables text, images, tables created through the use of other productivity software and technological equipment such as word processor, digital camera, to be set out professionally. It provides greater creative control than word processing alone and can be used, for example, to create newspapers and newsletters.

Ref: ACA/SLee/Jan05/0001
5.6 Multimedia authoring

<table>
<thead>
<tr>
<th>Product Examples</th>
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</thead>
<tbody>
<tr>
<td>• Clicker 4</td>
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<tr>
<td>• Hyperstudio</td>
</tr>
<tr>
<td>• MS PowerPoint</td>
</tr>
<tr>
<td>• Macromedia Suite</td>
</tr>
<tr>
<td>• Fabula software can be downloaded free: <a href="http://www.fabula-eu.org/en/software.htm">http://www.fabula-eu.org/en/software.htm</a></td>
</tr>
</tbody>
</table>

Multimedia authoring software enables text, image, animation, video and sound to be combined to create learning materials that help to reduce the language barrier and provide curriculum access for learners with little or no English. It enables learners to create professional looking work and provides presentation support once complete.

Bilingual multimedia authoring has the added advantage of providing first language support and raising the status of minority languages. Bilingual multimedia stories bring paper based bilingual books to life. Books can be used for teaching purposes and also made available, via the school website, intranet and/or virtual learning environment, for reading outside of the classroom. Learners can create their own books through collaborative class-based projects, which can in turn be used to support those entering the school with little or no English. Books could also be made about extended visits abroad, using scanned photographs taken with disposable cameras. By so doing learners have opportunity to share and celebrate aspects of their culture, and departments have opportunities to develop a bank of cross-curricular resources which reflect the diverse nature of the community as a whole.

- Sheilagh Crowther (CIRCLE, Ethnic Minority Achievement Service, Gloucestershire) describes how they make their own multilingual talking books using Clicker and how you can do the same (see Software: Talking books) [http://www.Becta.org.uk/page_documents/sen/talkingbooks.pdf](http://www.Becta.org.uk/page_documents/sen/talkingbooks.pdf)

- Hounslow Language Service and the Teaching Support Service in Hounslow used Clicker 4 to create a Talking stories CD which consists of a set of multilingual computer talking stories based on traditional tales (see Software and websites: interactive multimedia and talking books) [http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_2&id=742](http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_2&id=742)

- Lyn Pemberton looks at the advantages of using multimedia in minority language learning, outlines what is available and describes how you can make your own story books [http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_2&id=772](http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_2&id=772)

- ’Fabula’ is a European funded project aimed at developing easy to use software for children to be involved in creating interactive multimedia bilingual books using their own graphic material. The fundamental belief of Fabula is that self-made materials motivate learners and that the active involvement of children as collaborators rather than consumers is central to the successful use of the software in classrooms.

   ‘A Bilingual Multimedia Authoring Environment for Children Exploring Minority Languages’ [http://llt.msu.edu/vol6num2/edwards/default.html](http://llt.msu.edu/vol6num2/edwards/default.html) provides a description of the Fabula multimedia authoring software with examples of ways in which it has been used in schools in Europe. Case studies can be found at: [http://www.becta.org.uk/teachers/teachers.cfm?section=1_3_2&id=750](http://www.becta.org.uk/teachers/teachers.cfm?section=1_3_2&id=750)

Useful guidelines to support teachers in the creation of parallel bilingual texts can be found in the concluding sections of ’Some Challenges for Teachers’ 2000.

Fabula are currently developing their website in two major areas:

(i) Virtual library: library of bilingual stories created using the Fabula software

(ii) Virtual Fabula Community: email, bulletins, conferencing software.
5.7 Databases and spreadsheets

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pinpoint – Cambridge Software Publishing</td>
</tr>
<tr>
<td>• Microsoft Access</td>
</tr>
<tr>
<td>• Microsoft Excel</td>
</tr>
</tbody>
</table>

Databases and spreadsheets provide experience in retrieving information and developing problem solving skills.

Once data from practical activities, such as field trips, has been inputted the learner can select and represent information in a variety of formats which can also include pictorial representation to aid understanding.

This representation and reformulation of information provides learners with opportunity to use a range of thinking skills and exhibit their understanding of concepts in sophisticated ways which may be beyond their current level of linguistic competence. It also enables curriculum related language to be reused within a meaningful context.

5.8 Graphics

<table>
<thead>
<tr>
<th>Product examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <a href="http://www.mflgraphics.co.uk/resources/home.htm">http://www.mflgraphics.co.uk/resources/home.htm</a></td>
</tr>
<tr>
<td>• <a href="http://www.clipsahoy.com/index.html">http://www.clipsahoy.com/index.html</a></td>
</tr>
<tr>
<td>• <a href="http://www.google.co.uk">http://www.google.co.uk</a></td>
</tr>
<tr>
<td>• <a href="http://www.langpix.com/categories/index.shtml">http://www.langpix.com/categories/index.shtml</a></td>
</tr>
<tr>
<td>• <a href="http://freefoto.com">http://freefoto.com</a></td>
</tr>
</tbody>
</table>

The use of images is essential in supporting learners' understanding of curriculum content (see: The Distinctive Needs of Learners for whom English is an Additional Language: Comprehensible input and Comprehensible output).

Images can be created using digital cameras and scanners or downloaded from CD-ROMS and internet sites. Clip art images and photographs of everyday objects at home and at school can be found on a number of sites. Some sites include images that relate specifically to the curriculum. While most of the images found on the Internet are free to use for educational purposes, it is important to note that some may be copyright protected.

When selecting images for use in the classroom it is important to consider whether the images are:
• stereotypical or racist
• sensitive to learners’ prior experiences (refugee/asylum seekers may have had traumatic experiences)
• reflect the cultural heritages of all learners.
6.0 Choosing and Using Technology: Software and Web links

6.1 Software collections and directories

The following collections and directories provide a comprehensive guide to resources, software and sites supportive of learners with EAL. For this reason the remainder of this section will focus on the potential of different types of software/site and not on individual items within each category.

- [http://www.Becta.org.uk/teachers/display.cfm?section=1_3](http://www.Becta.org.uk/teachers/display.cfm?section=1_3) - Becta links to ESOL case studies, sites, resources and software
- [www.emaonline.org.uk](http://www.emaonline.org.uk) - Birmingham, Manchester and Leeds LEAs with funding from the DfES and support from NALDIC have developed an online portal of ICT activities for EAL/bilingual learners. The portal includes an online resource base and interactive materials in five community languages as exemplars of how content can be designed to support EAL learners
- [www.blen.org.uk](http://www.blen.org.uk) - Blen (Bilingualism, Languages/Literacy’s Education Network) have produced a directory of Electronic Resources for English as a Second or Additional Language (2002). The directory features more than 100 websites organised into categories with short descriptions and more than 50 software titles with annotations for teaching and learning purposes. A useful tool.
- [http://www.teem.org.uk](http://www.teem.org.uk) - Teachers evaluating educational multimedia
- [http://teachernet.gov.uk](http://teachernet.gov.uk) - Teachernet is the DfES service for teachers providing a wide range of resources.
- [http://tre.ngfl.gov.uk/](http://tre.ngfl.gov.uk/) - Part of the NGfL the Teacher Resource Exchange (TRE) is a moderated database of resources and activities designed to help teachers develop and share ideas for good practice. All resources on the TRE are checked by subject specialists to ensure they are of the highest possible quality.
- [http://www.curriculumonline.gov.uk](http://www.curriculumonline.gov.uk) - The Curriculum Online website provides the facility to search through thousands of multimedia resources. All resources have been aligned with the curriculum of subjects taught in schools in England.
- [http://www.qca.org.uk](http://www.qca.org.uk) - Practical examples of the use of ICT in curriculum areas and subject specific KS3 resources.
- [http://www.tes.co.uk/your_subject/subject_index.asp?subject=EAL](http://www.tes.co.uk/your_subject/subject_index.asp?subject=EAL) - TES Online (EAL section).
- [http://www.eslcafe.com](http://www.eslcafe.com) - Many resources at Dave’s ESL café.
- [http://www.collaborativelearning.org](http://www.collaborativelearning.org) - The Collaborative Learning Project has a wide range of collaborative activity ideas.
6.2 Curriculum software and courseware on CD-ROM / DVD

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Curriculum based software and courseware is available for most curriculum areas</td>
</tr>
<tr>
<td>- Examples of CD-ROM use: New College Durham</td>
</tr>
<tr>
<td><a href="http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=620">http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=620</a></td>
</tr>
</tbody>
</table>

A CD-ROM (Compact disc read only memory) is a read-only disc that stores text, graphics, video and/or audio information in the form of software that may be used for a multitude of purposes e.g. curriculum information, dictionaries, encyclopaedias, tutorials, listening comprehension activities.

Many CD-ROMs incorporate games. The problem solving nature of games together with high quality multimedia presentation is highly motivating and encourages learners to keep at a given task. Many of these programs fit into the bracket of drill and practice i.e. activities which enable learners to practice a skill repeatedly. These can help to consolidate learning but must be used only as one part of a wider program of support encompassing all areas of need as identified in this guidance.

Courseware is software that has been developed as an entire course in the form of CD-ROM/DVD and usually includes printed information and assessment tools. As most courseware is expensive it is best to view several options before committing to any one. When choosing CD-ROMs / DVDs for use with EAL and other students you should examine how well it can be used to meet the distinctive curriculum and language needs. Check that software:
- exploits the multimedia combinations of sound, video, graphics and text
- provides real life contexts
- aids understanding of subject specific language
- incorporate glossaries
- will run on a network.

6.3 Interactive multimedia and talking books

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>- <a href="http://cricksoft.com/uk/clicker_community/index.html">http://cricksoft.com/uk/clicker_community/index.html</a> (Clicker)</td>
</tr>
<tr>
<td>- <a href="http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_2&amp;id=742">http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_2&amp;id=742</a> (Hounslow)</td>
</tr>
<tr>
<td>- <a href="http://www.nepalibooks.com">www.nepalibooks.com</a></td>
</tr>
</tbody>
</table>

The multimedia nature of interactive books and talking books makes them particularly appealing to all learners and particularly supportive of learners for whom English is an additional language. Books on the market, however, are generally designed for English speaking learners at Primary level. Whilst it may be possible to use some primary targeted interactive books at Secondary level, care must be taken to select books with age appropriate content (KS4 learners may not be motivated by Floppy goes to Town!). Non-fiction books may provide helpful subject vocabulary.

Research suggests features which support the reading process for both first and second language learners include: 'a good match between illustration and text which helps learners cue what comes next when they are reading; and the use of a strong predictable story line which exploits repetition both in structure of the story and the language it uses', Edwards, Monaghan and Hartley ‘Bilingual Multimedia: Some Challenges for Teachers’ 2000.

Interactive talking books can be easily produced by teachers and learners using programs such as Clicker or PowerPoint (see Productivity tools) or can be purchased ready-made. The talking text can read individual words, selected sentences and whole books. Listening to the text being read and watching the pictures helps early stage learners access meaning, and more fluent users of English with limited literacy skills make links between spoken and written language.
• Sheilagh Crowther of CIRCLE, Gloucestershire’s Ethnic Minority Achievement Service, has produced a range of multilingual talking books (see web reference above).

• Hounslow Language Service and the Teaching Support Service used Clicker 4 to create a Talking stories CD, which consists of a set of multilingual talking stories, based on traditional and modern stories. There are three stories, and each is written in 11 versions. Nine versions have English with another language (Punjabi, Bengali, Hindi, Albanian, Somali, Arabic, Urdu, Gujarati and Portuguese). Originally the stories and activities were aimed at the primary age range, but parents have also enjoyed accessing the stories at an adult level. The illustrated texts and activities can be used to develop oracy and literacy skills. There are sequencing activities that can be used as a visual stimulus for learning and to check comprehension. Feedback showed that parents felt welcomed, valued and pleased that their home language was valued in school (see web reference above).

• A small number of English-Nepali books have been created in Powerpoint (see web reference above).

6.4 English language learning

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Becta list of English language learning sites <a href="http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=712">http://www.Becta.org.uk/teachers/teachers.cfm?section=1_3_1&amp;id=712</a></td>
</tr>
<tr>
<td>• BBC World Service <a href="http://www.bbc.co.uk/worldservice/learningenglish">http://www.bbc.co.uk/worldservice/learningenglish</a></td>
</tr>
<tr>
<td>• Talk Now! Eurotalk Interactive CD-ROM</td>
</tr>
<tr>
<td>• New Dynamic English: DynEd (USA) CD-ROM</td>
</tr>
<tr>
<td>• The Grammar Rom/The FCE Grammar Rom – Longman</td>
</tr>
<tr>
<td>• Successmaker (literacy and numeracy)</td>
</tr>
<tr>
<td>• The Alphabet :Protea Textware (early literacy)</td>
</tr>
</tbody>
</table>

To enable learners with EAL to academically catch up with their monolingual peers we must ensure access to and progress through the curriculum, and English acquisition through the integration of language and curriculum or subject content (NALDIC). EAL learners have a distinctive need for language learning in context and a need to acquire language naturally through meaningful interaction. Research has shown decontextualised language learning to be less effective ([Connecting Research to Policy: More Effective Schooling for Learners in Multicultural Communities: Collier and Thomas 2000](http://www.crede.ucsc.edu/research/llaa/1.1_final.html)).

English language learning software is generally decontextualised in nature and is not designed to meet the distinctive needs of EAL students learning English through the curriculum. However, where learners have daily access to inclusive, differentiated learning and teaching opportunities across the curriculum, it may provide useful additional support for small amounts of time each day or week.

Learning English software generally consists of games and activities that enable basic vocabulary, phrases, grammar and pronunciation to be absorbed in an exciting way using multimedia animation, sound, images and text. Some software allows learners to record their own attempts at words and incorporates opportunities for developing fluency and pronunciation through the use of speech recognition. Many games are drill and practice in nature where particular aspects of language are repeatedly reinforced. Topics covered are various and often include aspects of culture as well as language. Much of the software available is organised into different levels of competency allowing for differentiation and personalised programs of study. Some software is aimed specifically at more advanced learners of English as an additional language and may focus, for example, on errors commonly made by learners with EAL in writing. Learners’ responses can usually be recorded for teacher assessment and monitoring purposes.
Interactive video language courses offer much the same but have the added advantage of video footage from a variety of sources as the focus e.g. real life interviews with people in different locations around the world. Generally the learner is able to hear and see how language is used within a real context, and is able to view the text of any conversation and/or key words at any time. Comprehension may be further supported through the use of online dictionaries, translation facilities and activities which enable vocabulary and sentence structures central to the context of the video to be targeted. Most courses provide voice recording and speech recognition facilities, and some offer opportunity for learners to record their voices as one of the characters in the video.

6.5 ICT skills

**Product Example**

- Steps in ESOL

There are a number of programs available on the market which aim to develop basic ICT skills in text input, formatting, editing and simple design. One example, Steps in ESOL, focuses on teaching ICT and English language together. It helps learners to improve reading and writing while developing skills in ICT.

6.6 Translation

**Website Examples**

- List of the main web based translators (European only) [http://www.mezzofanti.org/translation/index.html](http://www.mezzofanti.org/translation/index.html)
- 'Jennifer's Language Page' has 'welcome' in 325 languages, 'hello' in 800, and other translations of basic phrases/words [http://www.elite.net/~runner/jennifers](http://www.elite.net/~runner/jennifers)
- Translated science vocabulary: [http://www.becta.org.uk/teachers/teachers.cfm?section=1_3_1&id=680](http://www.becta.org.uk/teachers/teachers.cfm?section=1_3_1&id=680)
- Translated ICT vocabulary: [http://www.becta.org.uk/teachers/teachers.cfm?section=1_3_2_1&id=2625](http://www.becta.org.uk/teachers/teachers.cfm?section=1_3_2_1&id=2625)

Translation software translates individual words, paragraphs and/or whole documents into the required language and is freely available to download. Although translation can provide valuable contextual support in aiding the understanding of early stage learners it is important to bear in mind that:

- Benefits may be limited where learners are unfamiliar with vocabulary and concepts in their first language
- Translation software can only select one meaning or usage from many alternatives for each word; it cannot be relied on for accuracy of interpretation. Consequently it should only be used to translate from the second language into the first as a means of aiding understanding
- Culturally specific vocabulary and phrases may have no direct translation

6.7 Dictionaries

**Website Examples**

- [http://www.advisory-unit.org.uk](http://www.advisory-unit.org.uk)

Dictionaries usually combine words, images and sound to support pronunciation and definitions of words. Additional features may include:

- translation facilities
- opportunity to search for words by theme and/or grammatical feature, for example, a search could be set for all nouns beginning with ‘b’
• activities and exercises
• photographs; maps; video footage; cross reference facilities
• flashcard production; recording facilities, for instance, learners could record themselves and compare their pronunciation with the original
• spelling tests; and progress reports.

6.8  Spelling

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking Star spell 2001-Fisher-Marriott Software</td>
</tr>
</tbody>
</table>

Programs that focus primarily on spelling allow students to build their own word lists. In selecting programs it is important that learners are able to hear the word spoken back to them. Many programs include features aimed at developing phonemic awareness and the learner’s ability to recognise and use common spelling patterns.

Software not specifically designed as ‘spelling’ software, for instance Clicker, can also be used to make personal dictionaries incorporating a growing bank of social and academic related vocabulary and phrases.

It can be helpful for newly arrived learners to include the names of friends and teachers within personal dictionaries.

6.9  Pronunciation

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Speech-DynEd (USA)</td>
</tr>
<tr>
<td>Pronunciation Power 1&amp;2 –ELC, Inc.</td>
</tr>
</tbody>
</table>

‘Clear Speech-DynEd’ is one example of a pronunciation program currently on the market:

‘This is a program designed to help improve the pronunciation of the learner. Learners can listen to the recorded voices (option of a male or female American speaker) and then try recording their own and comparing it. Clear instructions are also given on how to produce the sounds by being told how to position the mouth and whether the sounds are voiced or not such as v / f ’ (Blen Directory of Electronic Resources 2002).

6.10  EAL exam preparation

<table>
<thead>
<tr>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCE Tuor – Educational Software Products (Wida)</td>
</tr>
<tr>
<td>The First Certificate in English – Cambridge University Press (Wida)</td>
</tr>
</tbody>
</table>

There are a number of software packages available providing information and support in preparation for Cambridge University Press English language tests. Learners have opportunity to build test related vocabulary, experience different types of tasks that will be encountered in the tests, work through past papers etc.

The tests focus on reading, writing, speaking and listening and link to an international five level scale of language proficiency established by Association of Language Testers in Europe (ALTE). Further information regarding the five level scale can be found at: [http://www.alte.org/about/framework/index.cfm](http://www.alte.org/about/framework/index.cfm)
7.0 Choosing and Using Technology: Telecommunications

<table>
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<tr>
<th>Examples</th>
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</table>

Telecommunication technology enables learners to be engaged in ‘authentic’ communications. Research shows opportunity to use language for real communication increases motivation and self-esteem.

Emails/ and chat rooms can provide opportunity for learners to research and discuss coursework with peers and specialists.

Video conferencing involves the use of a video camera to connect and communicate over the internet. It enables one teacher to conduct a lesson with a number of students in different locations, giving them synchronous interactivity. This could be particularly supportive for learners in schools with small numbers of students from minority ethnic backgrounds and provide access to the curriculum where learners are on extended leave visiting relatives in other countries. Virtual classrooms offer a similar opportunity without the need for expensive items of kit in each location.
8.0 Whole School Provision

8.1 Vision and ethos

<table>
<thead>
<tr>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Policy</td>
</tr>
<tr>
<td>• School improvement planning</td>
</tr>
</tbody>
</table>

DfES guidance on use of EMAG states that schools are expected to ‘incorporate policies for EAL students and minority ethnic students at risk of underachievement in the SIP’. Schools are also expected to ‘reflect known good practice and include innovative approaches to make a step change in minority ethnic achievement’.

In order for this to be effectively achieved there needs to be allocated responsibility at senior management level for the strategic planning of ICT into EMA policy and practice across the school and for ensuring that implementation of such is both monitored and reviewed on a regular basis. It needs to be recognised that raising the attainment of minority ethnic students is not the responsibility of the EMA team alone but of all staff within the school. EMA actions plans and policy should make reference to the use of ICT and be accessible to all staff via the school MLE.

8.2 MIS data collection and administration

Management Information Systems: SIMS (Capita) Facility (Serco)

Management Information Systems aim to cut down the time spent on administration and facilitate the electronic management of teaching and learning as well as data transfer and analysis.

Management Information Systems are also used to generate data for PLASC (Pupil Level Annual School Census): production of this data is a statutory requirement. Ethnicity categories are defined by the DfES, however individual schools/LEAs can collect more detailed information if this is useful in the local context (for instance, recording country of origin as well as a general category such as ‘Black African’).

Data collection

Schools will find it useful to record a variety on non-statutory data to help them monitor the progress of EAL students. Once data has been entered any combination of fields can be selected for analysis. Cognitive tests, SATs, GCSE results and targets can be analysed over a number of years to help monitor the impact of provision on the attainment of different ethnic groups. Fields of particular relevance for analysing attainment and progress by ethnicity are suggested below.

- Ethnicity
- Fluency and literacy in first and additional languages
- National Curriculum level (including QCA ‘A Language in Common’ levels below level 1)
- Length of time in country
- Length of time in UK education
- Previous education outside UK
- Refugee/asylum status
- SEN
- FSM entitlement
- Attendance and punctuality
- Racial incidents
- Exclusions
- Inclusion in initiatives such as EiC
- Inclusion in extra curricular activities and clubs

<table>
<thead>
<tr>
<th>Example Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Benchmark data  <a href="http://www.standards.dfes.gov.uk/performance">http://www.standards.dfes.gov.uk/performance</a></td>
</tr>
<tr>
<td>• Pupil Attainment Tracking  <a href="http://www.dfes.gov.uk/com_trans/">http://www.dfes.gov.uk/com_trans/</a></td>
</tr>
</tbody>
</table>

Attainment can be monitored for ethnic groups through the comparison of school, local and national benchmark data. The Standards Site gives access to the Interactive Autumn Package, a downloadable software tool that processes and analyses pupil performance data and compares it to KEY STAGE 1-3/GNVQ national figures (see web reference above).

Information transfer from KS2 to KS3 can be facilitated through use of the DfES Common Transfer Form.

Ref: ACA/SLee/Jan05/0001
8.3 Role of inclusion staff during in class support

Schools are expected to 'deploy teachers and other staff funded by EMAG effectively to meet the needs of minority ethnic students and ensure that students for whom English is an additional language have full access to the National Curriculum, Literacy and Numeracy strategies' (DfES)

EMA support is most effective when the subject specialist and EAL specialist work in partnership with the planned support of the Teaching Assistant. A partnership approach enables teachers to share expertise and jointly develop strategies for meeting the distinctive needs of EAL learners within specific subject areas.

As equal partners, teachers will need to jointly plan and deliver differentiated teaching and learning opportunities that ensure progress through the curriculum and English language acquisition through the integration of language and curriculum or subject content. Additionally they will need to gather assessment information; evaluate the effectiveness of strategies used; and use this information to jointly plan further teaching and learning opportunities. It is essential that all staff have clearly defined roles during whole class teaching and independent activities for learning with the aim of scaffolding and extending learners’ thinking skills and use of academic language.

Departmental Support
The most effective model of deployment to achieve ‘step change’ in provision and practice is to target EMA support to subject departments for an identified period of time, such as, one term. By so doing departments and EMA teachers can work in partnership to develop the curriculum, resources, teaching strategies and explore opportunities for using ICT. EMA teachers and departments working in partnership have the opportunity to develop subject specific resource packs for future use. A suggested model for step change:

- EMA support targeted to departments in accordance with SIP priorities (departments may bid for EMA support)
- EMA teacher works in partnership with Head of Department (HOD)
- EMA teacher and HOD plan and deliver INSET for department disseminating good practice
- EMA teacher works with teachers across the department to embed good practice
- EMA teacher and department feedback developments across the school

Year/ Class Support
Where EMA funding is limited schools may choose to support year groups rather than departments (there are fewer year groups than departments). This model of deployment presents fewer opportunities for step change in provision and practice, however, it does provide opportunity for inclusion staff to attend year group meetings and provide individual skills support and pastoral support for EAL learners.

8.4 Learning and teaching materials

Purchasing resources
The ethnic minority achievement grant may be used to purchase teaching and learning materials (DfES). E-learning credits are available to Academies to purchase software prior to opening. With so much on the market it can be time consuming and expensive to locate specific curriculum, EAL and first language ICT based resources that support access and progression through the curriculum. Before purchasing any product:

- audit existing resources - do these adequately support languages / cultures within the school?
- consider what can be downloaded for free (see Software and websites: software collections and directories)
- consider which resources can be created using productivity software (see Productivity Software)
- check whether you can obtain test copies prior to purchase.
- check that the software will operate on your system.

Most publisher and software companies have catalogues and demonstration copies of software.

Ref: ACA/SLee/Jan05/0001
Developing departmental subject specific resource packs

EMA teachers and departments working in partnership have the opportunity to develop subject specific resource packs for future use. Pack contents could include:

<table>
<thead>
<tr>
<th>Pack contents</th>
<th>Technology used to create selected item</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Genre specific sentence structures for use during whole class teaching and group work</td>
<td>Word / Clicker</td>
</tr>
<tr>
<td>• Vocabulary lists, labels, flashcards, glossaries with image and first language support</td>
<td>Word / Clicker / translation software / dictionary software / multilingual processing software</td>
</tr>
<tr>
<td>• Images / photographs / diagrams / posters</td>
<td>CD-ROMS / digital camera / scanner / clip art</td>
</tr>
<tr>
<td>• Talking books / multilingual books</td>
<td>CD-ROMS / multimedia authoring software</td>
</tr>
<tr>
<td>• Information and context</td>
<td>Videos / DVDs / CD-ROMs</td>
</tr>
<tr>
<td>• Site and software recommendations with notes on how these might be most effectively used</td>
<td>Catalogues and directories / search engines</td>
</tr>
<tr>
<td>• Collaborative activities for paired / group work in the classroom</td>
<td>Off computer activities created through use of productivity software and images downloaded from software programs, sites and digital camera</td>
</tr>
</tbody>
</table>

8.5 The learning environment

- Dedicated VLE software
- School intranet
- School website

ICT enables the learning environment to be extended beyond the physical. Resources can be held on a virtual learning environment (VLE) or intranet. A dedicated VLE has many advantages:

- learners can showcase and share their work thus promoting cultural diversity, increasing motivation and raising self-esteem. Examples of how schools have done this have been gathered through the Becta/Guardian web awards [http://www.Becta.org.uk/schools/websiteawards/index.html](http://www.Becta.org.uk/schools/websiteawards/index.html)
- resources to support whole class teaching and collaborative group work can be created quickly and easily using tools available as part of the VLE. Once created resources can be made accessible to all teachers
- up to date information relating to linguistic and cultural awareness can be made accessible to all school staff
- information and images can be easily presented during meetings and assemblies using data projectors; activities to support language development and learning can be made accessible at home.

8.6 Home school community links

<table>
<thead>
<tr>
<th>Website</th>
<th>Information Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.dgteaz.org.uk">http://www.dgteaz.org.uk</a></td>
<td>Dingle, Granby, Toxteth EAZ and Liverpool LEA have produced standard letters to parents translated into 30 locally used languages that are available as a CD and online.</td>
</tr>
<tr>
<td><a href="http://www.islingtonschools.net">www.islingtonschools.net</a></td>
<td>Booklets for parents about schooling in the UK are available in English, Spanish &amp; Turkish.</td>
</tr>
<tr>
<td><a href="http://www.mantralingua.com">www.mantralingua.com</a></td>
<td>Newham EAZ OEWelcome Booklet on CD Rom enables you to make a booklet including colour photographs and key information about the school in 18 languages. Details from Mantra Lingua.</td>
</tr>
</tbody>
</table>

Ref: ACA/SLee/Jan05/0001
A series of guides for parents have been published by the DfES in Arabic, Bengali, Chinese, Greek, Gujarati, Hindi, Punjabi, Somali, Turkish, Urdu and Vietnamese.

A leaflet for parents on ‘The Advantages of Being Bilingual’ is available in eleven languages.

Home School Community links can be described as:
- uses of ICT which enable students’ learning to take place in an extended home-school work environment
- electronic communication between the school, students and parents
- remote access to school records and information from the home

Research findings suggest that home-school links can be a significant factor in school improvement and identifies a range of beneficial outcomes including: improved academic standards, increased self-esteem and a reduction in social exclusion. In order to ensure the needs of all are accounted for it is essential that minority ethnic parents and community representatives are involved in discussion of issues relating to content and delivery of home-school initiatives through ICT from the earliest stage.

Potential areas for development have been identified as:
- Email and video conferencing. **Issues to consider:** are there facilities for parents with little or no English to communicate in the first language / are there still opportunities to meet with staff face to face via an interpreter?
- Website providing information about the school, UK education system, interactive learning resources, mother tongue classes, out of school clubs, newsletters, community links. **Issues to consider:** is translated information available?
- Online learning / ‘virtual school’ providing online access to subject specific learning resources to support home-school-work. **Issues to consider:** do materials support understanding of academic language? Are translation facilities available?
- Community use of school-based ICT facilities. **Issues to consider:** does the school provide out of school clubs? Is there access to English language and community language learning software/sites?
- Laptop loans and subsidy schemes for families who are unable to afford home computers. **Issues to consider:** are these equally distributed across all ethnic groups?
- Locally produced educational content on TV networks
- Community intranets that link school intranets, libraries, museums etc.

Where schools involve parents in translating letters or in acting as interpreters at parents’ evenings it is important to bear in mind issues of confidentiality. Where students themselves are asked to act as interpreter for parents there may be issues regarding the sensitivity of the information to be passed on and the willingness on the part of some students to convey the message accurately. Alternatively, students may not have capability in their first language to make the necessary interpretations.
9.0 Continuing Professional Development

Training for EMA specialist and/or subject teachers needs to be clearly identified within the Academy’s continuing professional development plan. Schools are expected to enable EMAG funded staff to have appropriate professional development, and class and subject teachers to undertake professional development to enable them to meet the needs of minority ethnic students (DfES).

9.1 EAL training providers

<table>
<thead>
<tr>
<th>Training Provider</th>
<th>Description</th>
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<tbody>
<tr>
<td>NALDIC</td>
<td>• NALDIC (National Association for Language Development in the Curriculum) is the subject association for teachers of English as an Additional Language. It promotes the effective teaching and learning of bilingual and EAL students and provides a professional forum for the teaching and learning of English as an additional language; raising the achievement of ethnic minority learners; supporting bilingualism; development and understanding of this field of education. Membership to this organization is strongly recommended. Members benefit from termly newsletters, publications and research reports; access to annual conferences featuring internationally known speakers, workshops and publisher exhibitions; and invitations to join special and regional interest working groups. NALDIC and the TTA have been jointly involved in developing an online induction pack and program for teachers new to the area of EAL and bilingualism and online teaching and learning materials linking research and practice for teacher trainers in a variety of settings <a href="http://www.naldic.org.uk">www.naldic.org.uk</a></td>
</tr>
<tr>
<td>LEA EMA Services</td>
<td>• Ethnic Minority Services in most LEAs run central and school-based training targeted at mainstream as well as EMA funded teachers. Academies should contact EMA services in both their own and neighbouring LEAs to find out what training is available and possibilities of buying into this.</td>
</tr>
<tr>
<td>Universities and Colleges</td>
<td>• It is also worth contacting local colleges and universities. London academies should contact: The Institute of Education based in Russell Square, London Language and Literacy Unit based in the South Bank University <a href="http://www.sbu.ac.uk/lllu/index.shtml">http://www.sbu.ac.uk/lllu/index.shtml</a>, Tower Hamlets College <a href="http://www.talent.ac.uk">http://www.talent.ac.uk</a></td>
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</table>

9.2 EAL/ICT training providers

<table>
<thead>
<tr>
<th>Training Provider</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>School departments</td>
<td>• Currently there is very little guidance or training for using ICT in EAL. The best approach may be to ensure that EAL staff have received training on the hardware and software that they are going to be using and that ICT staff have received training in issues relating to the field of EAL in order that this may be developed across the curriculum.</td>
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9.3 ICT training providers

<table>
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<tr>
<th>Training Provider</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Academies</td>
<td>• See separate academies document on training</td>
</tr>
<tr>
<td>European Community</td>
<td>• A European recognised accredited course aimed at developing basic ICT skills. Modules include word processing, database, spreadsheets and presentations. ECDL test centres provide access for community members, staff and students to work through modules and sit exams.</td>
</tr>
<tr>
<td>Driving Licence (ECDL)</td>
<td>• Cricksoft run their own Clicker 4 courses mainly aimed at the primary sector but would also be able to tailor training to the needs of a particular academy assuming there is a viable group size. It needs to be noted, however, that their expertise is in Clicker and not the pedagogy of EAL <a href="http://www.cricksoft.com/uk/clickercommunity/index.html">http://www.cricksoft.com/uk/clickercommunity/index.html</a></td>
</tr>
<tr>
<td>Clicker</td>
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</table>
10.0 Further Information

10.1 Online discussion forums

Becta provide one of the most effective discussion forums in the area of EAL

The TES also host an online discussion group at:
http://www.tes.co.uk/staffroom/listthreads.asp?forumName=forum%5FEAL

10.2 Web sites

Becta provide general advice, resources and case studies on the use of ICT in support of EAL.

NALDIC (see Professional Development): http://www.naldic.org.uk

The Refugee council provide information on issues relating to refugee and asylum seekers
http://www.refugeecouncil.org.uk

Blen (Bilingualism, Languages / Literacies Education Network) have produced a directory of Electronic Resources for English as a Second or Additional Language (2002) which also includes guidance on using ICT to support EAL learners. The directory features more than 100 websites organised into categories with short descriptions and more than 50 software titles with annotations for teaching and learning purposes. It includes all software titles and internet sites recommended by teachers who responded to the Blen ESL/AL survey. A very useful tool. The directory can be purchased from Blen 0207 281 8686 and http://www.blen.org.uk

The Centre for Information on Language Teaching (CILT) is the government’s recognised centre of expertise on languages (primary, secondary and HE). The organisation’s mission is to promote a greater capability in languages amongst all sectors of the UK population: http://www.cilt.org.uk. The community languages area of the website is at: http://www.cilt.org.uk/commlangs/index.htm

Basic Skills Agency provides information and training materials for organisation and teachers offering English language provision to refugee and asylum seekers in the post-compulsory education sector. Document entitled ‘Working with Refugee and Asylum Seekers: Support Materials for ESOL providers’ is downloadable from the resources section on their website at http://www.basic-skills.co.uk. Although this material is aimed at those working with adult learners, some of it will be appropriate for Academies who have older EAL learners.

A number of EMA services have well developed websites providing both information and resources:

- Portsmouth Ethnic Minority Achievement Service at http://www.blss.portsmouth.sch.uk
- Manchester City Council at http://www.manchester.gov.uk/education/emas
- Islington EMAS section of the CEA@Islington web site http://www.islingtontschools.net. Click on Teaching & Learning, then EMAS.

Search words
- EAL / E2L / ESL / ESOL / EMA
- Bilingual
- Refugee
- Asylum
- Minority ethnic
- Linguistic minority
10.3 DfES, Ofsted, QCA publications relating to EAL


The EMA related publications listed below can be downloaded from the following sites:

<table>
<thead>
<tr>
<th>DfES</th>
<th><a href="http://www.standards.dfes.gov.uk/ethnicminorities/links_and_publications">http://www.standards.dfes.gov.uk/ethnicminorities/links_and_publications</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ofsted</td>
<td><a href="http://www.ofsted.gov.uk/index.cfm?searchString=ethnic+minority+achievement&amp;fuseaction=pubsSearch">http://www.ofsted.gov.uk/index.cfm?searchString=ethnic+minority+achievement&amp;fuseaction=pubsSearch</a></td>
</tr>
<tr>
<td>QCA</td>
<td><a href="http://www.qca.org.uk">http://www.qca.org.uk</a></td>
</tr>
</tbody>
</table>

- Aiming High: Understanding the educational needs of minority ethnic pupils in mainly white schools (DfES/0416/2004)
- Writing in English as an additional language at KS2 (DfES: Cameron 2004)
- Aiming High: Supporting effective use of EMAG (DfES/0283/2004)
- Managing the Ethnic Minority Achievement Grant: Good Practice in Secondary Schools (Ofsted 2004 Ref: HMI 2172)
- Managing the Ethnic Minority Achievement Grant: Good Practice in Primary Schools (Ofsted 2004 Ref: HMI 2072)
- Aiming High: Raising the achievement of Gypsy Traveller pupils (DfES/0443/2003)
- Aiming High: Raising the Achievement of Minority Ethnic Pupils (DfES/0183/2003)
- More Advanced Learners of English as an additional language in secondary schools and colleges (OFSTED 2003)
- Writing in English as an additional language at KS4 (DfES: Cameron 2003)
- KS3 National Strategy ‘Access & Engagement in (various subjects) : Teaching pupils for whom English is an additional language’ (DfES 2002)
- KS3 National Strategy: Framework for teaching English (also for teaching Mathematics, Science, MFL and ICT) : Years 7,8 and 9 (DfES 2001). Each document contains sections addressing issues of support for EAL learners
- Support for minority ethnic achievement: Continuing professional development (Ofsted 2002 HMI 459)
- Mathematics Assessment Toolkit for EAL – CD-ROM (DfES)
- Inspecting English as an additional language 11-16 with guidance on self-evaluation (OFSTED 2001)
- Managing support for the attainment of students from minority ethnic groups (Ofsted, 2001; ref: HMI 326)
- Raising aspects of minority ethnic achievement (ref: DfES 0639/2001)
- Educational Inequality: Mapping race, class and gender (OFSTED 2000 HMI 232)
- Removing the Barriers: Raising the achievement levels for minority ethnic pupils (DFES 2000)
- A Language in Common: assessing English as an additional language (QCA 2000)
- Raising the Attainment of Minority Ethnic Pupils: School and LEA responses (OFSTED 1999 HMI 170)
- Making the Difference : Teaching and learning strategies in successful multi-ethnic schools (DfES 1998)
- Recent research on the achievement of ethnic minority pupils (Ofsted 1996 HMI 0-11-350084-x)
- ‘Good Practice Guidance on the Education of Asylum Seeking and Refugee Children’ DfES Standards Site

Ref: ACA/SLee/Jan05/0001