Computer applications in working with bilingual students are reviewed in this newsletter. A variety of practical ideas are presented to support teachers in their instruction. They include the following: (1) software to supplement vocational training; e.g., materials that introduce the use of word processing, databases, and spreadsheets in an office environment; (2) supplemental materials for English for Speakers of Other Language (ESOL) students, including instruction in the mechanical skills of handwriting as well as cognitive skills; (3) software that supplements traditional educational programs; and (4) data free programs, which help exploit the student's languages and may use a concept keyboard to extend the possibility for using a student's own language. Some of the software mentioned includes Workroom, Newtown, Context, Allwrite, Multilingual Scholar, and Advanced Folio. (LB) (Adjunct ERIC CLEaringshouse on Literacy Education)
What contribution can computers make to work with bilingual adults? Glenys Smith, Development Officer at the Bristol Open Learning Centre, outlines practical approaches.

Progression
It is undoubtedly true that the demand for hands-on computer skills is not going to disappear as a passing fad. The experience of Open Learning centres and other groups who have had access to computers bears this out. Despite apprehension and reluctance on the part of some tutors, students want to acquire basic computer skills and enjoy using them to support language learning.

There are still, unfortunately, too many situations where the access to computers or 'the computer' is inadequate, unnecessarily difficult or poorly technically supported. If you are going to invest time and effort into becoming familiar with using computers, exploring the range of software available and developing support materials for use in the classroom, you need to be guaranteed available machines, programs which work and at least readable manuals on hand to support your endeavours. There also needs to be some sort of system for recording problems and dealing with these in a reasonably short space of time.

For those of you still reading...what follows is a variety of ideas for using computers to support your teaching.

The Vocational Link
Experience at the Open Learning Centre in Bristol has shown that many students who would otherwise not present for help with language or communication skills, are attracted by the possibility of learning computer skills. Language and literacy difficulties will then often emerge and can be worked on within this framework.

Thus courses which are advertised as some form of introduction to IT can provide an excellent vehicle for language and literacy programmes. These may include accreditation, such as the RSA CLAIT certificate or the AEB certificate in Basic Computer Awareness, or may comprise your own structured introduction to the use of computers for work or study.

The new NECNFER pack, Workroom, written by Janet Leonard provides a good example of one such programme. The computer based materials, which give an introduction to using wordprocessing database and spreadsheets in an office, are supported by paper based learning and practice exercises. These range from alphabetical order, through telephone skills, to report writing.
computer materials, are appropriate for bilingual learners. In other words you need to apply the same principles as in other provision, namely:

- Build on students’ existing skills by utilising their community languages wherever possible.
- Basic processes and procedures for using computers could be translated and displayed as wall charts.
- Tapes in main languages could be used to introduce new topics and modules.
- Names, examples and applications cited should reflect a diversity of cultural interests and concerns.

New vocabulary may not translate directly so students will need a system for recording and learning this.

<table>
<thead>
<tr>
<th>New Word</th>
<th>What it sounds like</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROGRAM</td>
<td>برامج</td>
<td>Program</td>
</tr>
<tr>
<td>PERIPHERAL</td>
<td>بارجود</td>
<td>Peripheral</td>
</tr>
<tr>
<td>PRINTER</td>
<td>پرینتر</td>
<td>Printer</td>
</tr>
</tbody>
</table>

These can be photocopied onto card and built up into a vocabulary file to be made available to other students.

Finally, if students are attending such provision alongside more traditional ESOL, try and use this experience to reinforce any work towards accreditation. You might, for instance, encourage students to reflect on their work with computers in terms of the RSA profile sentences. This will enable you and the students to identify where particular help is needed and should also provide opportunities for evidencing the various objectives. For example:

- Asking for help (02)
- Explaining that a procedure hasn’t worked (010)
- Following instructions on a worksheet (R6)
- Writing letters for Wordprocessing practice (W7, W8)

### Supporting Language Provision

Independent of any expressed desire to learn IT skills for work, computers can be used with great effect to supplement and support more traditional teaching methods.

ESOL students will usually write in their first language using a different script. Learning to write in English thus involves the mechanical skills of handwriting as well as the cognitive skills involved in expression through a new language. Using a computer allows these two skills to be separated. By using the keyboard, the student can focus on the latter and create a piece of work which is immediately clear and legible. In addition, the ability to manipulate blocks of text on screen means that the skills of layout and presentation can also be dealt with separately.

### Educational Programs

As tutors, we all look for materials which are relevant and usable by our students with minimal adaptation. Inevitably such packs are few and far between and we end up cutting, sticking and inserting our own ideas and content.

Such adaptation is just not possible with many computer programs which are advertised as developing language and communication skills. This is because to ‘cut and stick’ we would also need to become computer programmers! However, there are programs which have an authoring facility. This means that you are given model exercises but it is also possible to add your own, customised to your students’ needs. Context, the spelling program which was developed to support the ‘Spelling it Out’ series on TV is one example of this.

Another difficulty with language programs is that most have been developed for the EFL market and are, therefore, often inappropriate and/or expensive.

However, there will be educational programs which you can use such as Newtown produced by ILECC for ALBSU. This is a simulation of someone moving to a new town and having to cope with all the attendant problems. It lends itself to the development of related oral and paper based work which could focus on particular language issues. The new Basic Skills Software Guide, available from ALBSU, provides comprehensive and up to date information on available software for ABE and ESOL. Details of all the programs mentioned in this article can be found in it.

There are other programs, not intended primarily as teaching tools but as databanks of information, which can also prove useful. Healthdata is one such program containing masses of health related material including sources of help and further information. The pack Health Matters, available from ILECC, was developed to exploit this source for communication skills practice. It is aimed at ABE rather than ESOL students but it demonstrates the way such sources can be utilised and linked into an accreditation scheme – in this case Wordpower.

If you have the necessary hardware available, some CD ROM materials provide interesting and extensive databanks around which valuable materials could be developed. Most of this is, at present, aimed at schools but Cambridge Training and Development have produced a literacy disc for adults and are currently working on one for numeracy. It is intended that material in the latter will be presented in a choice of Community languages.

### Data Free Programs

Most of the potential for language work, however, still lies with the data free or generic programs. Wordprocessing, database and spreadsheet programs are now available in varying degrees of sophistication and complexity, (see software guide). All can be used to produce a range of customised materials at a variety of levels.

The use of wordprocessing generally has been well documented in this respect (1) and the pack Wordprocessing for Literacy Skills, available for various programs, offers a model of how to apply these ideas.

In the limited space remaining some ideas to extend this kind of work will be explored.

### Exploiting the student’s languages

Some wordprocessing programs have the extra facility of producing community languages. Allwrite and Multilingual Scholar, for IBM and Nimbus machines, and Advanced Folio, for the BBC, are examples of these.

In the case of Allwrite, a keyboard representing the alternative language is made available on screen allowing the student to wordprocess in her own language using the mouse. Thus computer skills can be accessed in a familiar language so simplifying the number of skills to be juggled with at any one stage of the learning process.

Students may also want to use this facility to ‘rehearse’ an account or report to be written. This could then be used to explore the way her language is organised compared to English structures. With the help of your students you could be well on the way to producing some valuable bilingual worksheets!
It's also worth having such programs so that bilingual students, too, can take advantage of technology to write a letter home to family or friends, or word process notes explaining some teaching point.

**Concept Keyboards**
The use of a concept keyboard further extends the possibility for utilising a student's own language.

A concept keyboard is a flat A4 or A3 sized pad which plugs into the computer. It can be used instead of, or as well as a conventional keyboard.

Each square, or combination of squares, will produce a message on the screen when pressed. This might consist of letters, words, phrases or sentences. A paper overlay sits on top of the pad and may have pictures, words, or a combination of both on it. This is what the student sees and presses. So for example, the student may see a picture of various tools used in a workshop and pressing any one of these could produce its name on screen.

There are few commercially produced concept keyboard materials for adults and non aimed specifically at ESOL students. Fortunately, it is surprisingly easy to prepare your own. The programs which support the use of a concept keyboard provide on screen step by step instructions for creating overlay files. This means that you can decide which messages come up on screen when different parts of the concept keyboard are pressed, linked to whatever overlay you design.

An ESOL tutor in Bristol has produced a set of overlays aimed at teaching bilingual students a phonic approach as one strategy in learning to read English. A tape accompanying the pack gives instructions in English and Urdu. Each overlay presents a series of pictures each representing a one syllable word. The student is asked to listen to the first word and then press the corresponding picture. The word is displayed on the screen. The student is then asked to press the word's constituent sounds chosen from English letter sounds displayed along the top of the overlay in Urdu characters. The letters appear next to the original word on the screen for self checking. This pack was produced using a program called Prompt/Writer.

Another program, Touch Explorer Plus, allows overlays to be linked together and accessed via a series of up to six levels marked on the overlay. This possibility lends itself to a range of uses where you might want the student to explore some material in a variety of ways, for example, teaching verb tenses.

A common overlay can be used to produce sentences where the verb tense changes as different level squares are pressed. These squares appear on the overlay marked now, everyday, yesterday and tomorrow.

In other words, if the square marked everyday has been pressed, pressing pictures 1 and 2 will produce, on screen, the sentence:

'she gets up and has a shower.'

When yesterday is pressed first, pressing the same two pictures will produce the sentence:

'she got up and had a shower.'
The possibilities are endless and the results well worth the investment of time needed to learn the necessary skills. Prompt/Writer and Touch Explorer Plus are available for BBC and Nimbus machines.

Minnie, available for Nimbus, is a wordprocessing program with an extra facility rather like having a concept keyboard on the screen, which is split into two areas. The larger part is available for wordprocessing in the usual way but the lower area can be used to display letters, words, sentences, etc., pre-prepared by you. In the example shown, a student has to select words from the lower screen and decide where they should be inserted into the text. Four coloured boxes, at the very bottom of the screen, can each give access to a different store of words, phrases, etc. These then become options in the lower area when the box is selected with the mouse.

The student reads the text and the words. She uses the mouse to place the cursor where she wants to insert a word. Clicking on the chosen word in the lower area results in it being copied into the sentence. If she selects the next coloured box she will be offered an alternative set of words which she could insert into the sentence.

Again the possible applications of this program are numerous. You could use it for spelling, word order, sequencing or prediction. You have the choice of what appears on screen. Instructions can be given to the student orally, on paper worksheets, on tape in a community language or included on screen at the beginning of the exercise.

This insert has explored just a few ideas for using computers with bilingual adults. If it has whetted your appetite and aroused your curiosity then it has succeeded. The best use of computers will be made when you can find the time to become familiar with a couple of programs so that you and your students can start experimenting with them in the classroom.