Young learners and technology

Research shows that appropriate use of computer technology in education is beneficial for pupils (Clements and Sarama; Waxman, Connell, and Gray; Byrom and Bingham). Broadly speaking, pupils can learn from computers and with computers. Pupils learn from computers when the computer assumes the role of a tutor, with the goal of imparting and increasing basic knowledge and skills. Pupils learn with computers when the computer serves in the role of a facilitating tool, with the goal of developing critical thinking skills, research skills and the creative imagination (Ringstaff and Kelley).

Computer activities should be age-appropriate and foster instruction in ways that increase learning, motivation, personal productivity and creativity. For example, (Perry) noted that “Children three to five years old are natural ‘manipulators’ of the world – they learn through controlling the movement and interactions between objects in their world – dolls, blocks, toy cars, and their own bodies.” Children are naturally curious and willing to interact with computers, and they enjoy their ability to control the type, pace and repetition of an activity. In some cases, children have even managed to learn how to use a computer with no instruction at all, through their own curiosity, fearlessness, and persistence. (Mitra).

Computers in the English language classroom

The decision to use computers in the language classroom, including the English language classroom, requires the establishment of both technological goals and language-learning goals. For young children, goals such as the following facilitate a path to focused learning.

<table>
<thead>
<tr>
<th>Technology Objectives</th>
<th>Language Objectives</th>
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<tbody>
<tr>
<td>To become familiar with the parts of a computer (GPU, screen, keyboard, mouse, cursor, printer and so on).</td>
<td>To use English to interact in the classroom and to communicate in social situations.</td>
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<tr>
<td>To become familiar with approved software programs for the classroom.</td>
<td>To use English to describe self, family, community and country.</td>
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<tr>
<td>To become familiar with operations (select, drag, save, delete and so on).</td>
<td>To use learning strategies to increase communicative competence.</td>
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<tr>
<td>To become familiar with finding, filing, tracking and organising information.</td>
<td>To develop the four skills: listening, speaking, reading and writing.</td>
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<tr>
<td>To share information and collaborate with others.</td>
<td>To pronounce English words, phrases and sentences intelligibly.</td>
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<tr>
<td>To develop learner autonomy.</td>
<td>To use appropriate register.</td>
</tr>
</tbody>
</table>


Teachers of English to Speakers of Other Languages, Inc. ESL Standards for Pre-K–12 Students.

References


Mitra, S. “Hole in the wall – can kids learn computer literacy by themselves?” Generation YES Blog.


The Online Island is an immersive world which accompanies the *Our Discovery Island* series. It is a ground-breaking digital product, combining the methodologies of classroom-based ELT and game-based learning. It is a safe learning environment, suitable for young learners which, via an internet connection, can be:

- used on individual computers at school or at home
- used in groups at school
- used through the Active Teach IWB software

It provides immediate feedback on performance; and contains features that appeal to young learners, such as colourful attractive visuals, clear audio providing excellent pronunciation models, animation, and game-like activities, all of which play a part in pupil motivation. It is carefully calibrated to appeal to children between the ages of 4 and 12. The target vocabulary and grammar directly reinforce the syllabus of the course. Because tasks are intuitive and clear, and because students receive immediate audio and visual feedback on their progress, the programme builds learner confidence and independence.

The Online Island was authored by a team of ELT specialists and multimedia games developers and offers rich and engaging digital worlds which build on the language and aims contained within the books. The main emphasis is on expanding vocabulary while the pupils learn through playing language games and achieving tasks. New language is introduced gradually as pupils learn through playing language games and achieving tasks. New language is introduced gradually and contextualised so that pupils feel confident and motivated to complete each level. The key concepts which have guided the design are:

- **Immersion.** The Online Island takes pupils out of their classroom or home environment and immerses them in a coherent and believable context. Engaging content and beautiful design hold the pupils’ interest and motivate them to continue with the adventure. Research conducted with the Online Island indicates that even very young children are able to maintain concentration and enthusiasm for long periods of time.

- **Stealth learning.** The Online Island is enjoyable and learning takes place almost without the pupils being aware of it. Rather than mirroring the type of tasks in the Pupil’s Book, pupils learn via interactions with characters in the adventure. They are presented with real-world-like tasks, giving them a sense of responsibility and active involvement which is extremely motivating. Learning takes place through listening and reading comprehension of speech bubbles, and through exposure to the target lexical sets via speech bubbles, dialogues, the Picture Dictionary and supplementary language games.

- **Mastery.** Striking the right balance of challenge and achievability is a key component in any game. The Online Island has been carefully designed to introduce the key skills needed to complete the task at the start of each level, and then by slowly building the complexity of the language pupils encounter. It is important that pupils find the tasks within the adventure sufficiently challenging. Children with prior exposure to digital games expect to fail at complex tasks several times before achieving them. This makes the tasks more, not less, satisfying, once achieved and encourages exploration and educational risk-taking. The model of ‘try, fail, repeat, succeed’ is also important because it gives repeated exposure to the target language, ensuring that pupils comprehend the language before they move on.

- **Control.** Pupils love immersive worlds because they feel free within them. They can move their avatar around at their own speed and in their own chosen direction. They are also free to experiment and to fail without censure or observation. This gives them confidence and motivation. The Online Island has been designed to allow children sufficient freedom to enjoy the adventure and games, but at the same time to carefully channel them towards the learning outcomes and to expose them gradually to the target language. A carefully controlled gating system means they must achieve certain tasks before progressing into new parts of the adventure. A starred report card system motivates them to complete all the tasks within a scene but gives them some freedom to determine when and how they do this.

- **Reward.** The Online Island includes many of the most popular features of existing games, such as collectible items, costumisation, avatar design and ‘hidden’ rewards such as new characters who appear once certain tasks are complete as well as audio and visual feedback to a task.

**Teacher support**

We recognise that many teachers are likely to be unfamiliar with this type of component and have developed a series of help guides both online and as a download to be printed to help teachers gain confidence in using the Online Island in the classroom, assisting pupils with queries about the tasks, or setting parts of the Online Island for home study.

In conjunction with this there are video walkthroughs of each level, to answer queries about specific sections of the adventure. These videos can also act as an introduction or provide quick support for teachers who don’t spare the time to work through the Online Island themselves.
All teachers will receive an individual access code to the Online Island and, unlike the pupil version it will contain a map, allowing them to skip back and forward between scenes.

For ease of classroom management there is a Progress Review System (PRS) where teachers can register their classes and monitor their progress. Parents can also view pupils’ progress via the Report Card online.