

A beginner's guide to ILS

*This article is a summary of the Research project undertaken by **Rebecca Haden** of Newman College as part of her degree studies*

What is ILS?

An Integrated Learning System is a computer package which provides interactive activities on different subjects. This research focuses on the RM Maths ILS.

The program decides which activities are appropriate for each child, based upon teacher's initial inputs and pupils' subsequent attainment. Through the teacher's menu it is possible to see how children are using the ILS. These pages give individual information on children, which includes the time spent on the system, problems, progress, position, scores and skills. The teacher's program also provides class details showing where each child is with regards to the National Curriculum levels.

The basics

- Children use the ILS individually for a session of not less than 15 minutes, three times a week.
- Children click on their name in the class list to access their own work. The ILS records the children's responses, their progression through the units and the problems they encounter.
- Children wear headphones when using the ILS and the system gives children audible feedback on their responses, telling them if they are correct

or incorrect. The questions are also spoken in case child's reading skills are poorly developed.

- When children complete activities successfully they are moved up to the next level. If children are unable to give a large proportion of correct responses then they are moved down a level.
- Input is mainly by means of the mouse and keyboard.

How to use an ILS

- Enter children's names onto the system.
- Allow children to use the ILS independently.
- Children's progress should be checked regularly.
- Children's problems are highlighted; it is important that these are noted and a time is set when they can be reviewed.
- Younger children (Key Stage 1) may need to more supervision initially but following approximately five sessions less supervision is required.

When to use an ILS

- The ILS is best used as a supplement to Maths teaching and not in place of it. Children will need two or three sessions a week on the ILS.
- Children's sessions will have to be timetabled. It is important that time from ICT *is not* given to ILS because the two are completely separate.

What you need to use an ILS

- In order to use an ILS you will need access to more than one computer and ILS licenses.
- The school will need to decide if ILS is what it wants and if the whole school is prepared to work together in order for successful implementation.

Using ILS with your year group

- The ILS provides activities for all age groups across the Primary phase. There is extensive coverage of the National Curriculum.
- The youngest pupils will have most difficulty with basic ICT skills.
- Key Stage 2 children can use the system independently and with minimal supervision.
- The best way to check if the system is appropriate for your Year Group is to test it.

How does an ILS help the class teacher?

- When children are using the ILS they are constantly monitored. This is useful in identifying any problems children have.
- The ILS equates children's performance to a National Curriculum level, this can be useful for checking your own assessment of children.
- The ILS provides detailed reports on children, which can be adapted and used when the child's yearly report is written.
- Teachers don't have to make lots of work sheets and mark them when children have to practice certain concepts over and over again.

Which aspects of Maths does the ILS address?

This ILS doesn't work with the National Numeracy Strategy with regards to each term's work. Research Machines, who make this ILS, are aware of the fact that the system doesn't correspond with Numeracy teaching; however, they defend this, explaining that topics children will not have covered for some time are kept simmering using ILS. Teachers will need to consider if and how they can make use of ILS within the NNS framework.

Guidance for the optimum use of ILS*Time*

- Increased exposure to the ILS is reported to lead to extra benefits.
- Regular and consistent use was said to have a positive impact for all abilities, but requires careful monitoring and appropriate teacher intervention.

- When pupils had minimal weekly exposure to the system they failed to show gains.
- A minimum amount of time on the system is required before obvious gains can be made. Teachers should not expect instant results.
- Teachers need to be aware of how important children's time on the system is.

Supervision

- Pupils need to be supervised.
- The level of supervision of pupils working on the ILS contributes to the success of the ILS.
- The ILS alone can't lead to success; supervision is a key factor.
- When the children are using the ILS they must be focussed on the task. (How can the class teacher ensure this?)

Rotation

- Children are less disrupted by the ILS, when they know when it is their turn, and that they are going to have a go.
- Children are less disrupted by ILS use if they don't miss the introduction to the lesson.

Integration

- Teachers need to use the technology meaningfully, the integration of ILS work into the curriculum is important.
- Schools have to set targets for pupils, which must be high in expectation.
- The ILS is not an additional curriculum that should be kept separate from normal classroom activity but another educational intervention assisting the mainstream curriculum.
- Teachers need to be given training on integrating the ILS into class work.
- Teachers need to use the assessment reports diagnostically.
- The ILS has been noted to be good for revision.
- Scaffolding by the teacher is required in order to achieve transfer of skills. ILS should not be viewed as self contained it needs to be carefully integrated.

Whole-school issues

- 12 or more high-powered computers contribute to success.
- An ILS co-ordinator who reviews the children's individual progress weekly is advisable.
- A large budget needs to be available.
- Senior management need to be supportive.
- A very high level of staff commitment is required to use the ILS properly.

- ILS is a whole school responsibility; a policy may be required.
- Successful implementation was found to be due to the acceptance of the ILS by the whole school, integration into curriculum planning and teacher's training.
- Strong leadership will aid ILS use in school.
- Staff who share vision and goals both contribute to success.
- Focus on achievement is a requirement.
- Enthusiastic teachers enable effective ILS use.
- Negative effects are the cost and the fact the ILS isn't exclusively a teaching tool.
- Teachers need to be prepared to learn how to adapt their teaching strategies to make the most of ILS.
- The ILS is most effective when used as a supplement to rather than a replacement for teaching. (Any supplemental instruction is bound to increase results because time on task correlates to increased achievement.)

Teacher support

- Ongoing staff support is required.
- Staff will require guidance in record keeping and monitoring.
- Staff development is of value when using the ILS in school. Support and motivation are also valuable.
- Teachers need to be given time within the working week to develop ILS support skills.
- Specific training on the ILS should be given before commencing use of the ILS.
- Following use of the ILS teachers were reported to want further training with the system including how to use the reports and how the ILS can be used alongside class teaching.

Child issues

- Children need to develop basic IT skills in order to use the ILS. The children can appear engaged in the task when they are really confused. Slow learners require support.
- If children are helped in the early stages then they become more independent and confident.
- Children with SEN and ESL may have problems with the language involved in ILS use. Their progress may be hindered as a result. The ILS can help raise confidence and enthusiasm amongst children in Maths.

Role of class teacher

- The class teacher plays the main role in using the ILS.
- If children can't get questions correct this leads to dissatisfaction and distraction.
- Learning may not be fully understood.
- Most systems offer limited help, often simply showing the correct answer leaving the learner confused.
- The ILS is only as effective as the teachers using it.
- Pupils benefit more if teachers get involved.
- Teachers need to maintain an overview of their pupil's progress and understanding and make regular inputs by direct teaching.

Suggested phases teachers should follow if considering ILS use

Phase 1

Teachers are introduced to the ILS and given basic training in its use.

Phase 2

Teachers trial their class on the ILS for one or two months, preferably at the start of term, using only the licences that are available. Teachers would have to use any time they can make available for ILS during this trial period. Teachers familiarise themselves with the system.

Phase 3

The teachers decide whether or not to continue with ILS use, considering if they think they can fit it into normal teaching. If the teacher thinks that it won't work with their class or their class isn't making overall progress then ILS use is probably best avoided. If the class teacher decides not to continue with the ILS then children are removed from the system.

If the class teacher does want to continue with ILS use then he/she will need to see which children the ILS is appropriate for. Teachers should review children's progress and any children who haven't made progress should be removed from the ILS. The class teacher will then need to check which teachers are already using ILS and, following a meeting with Senior Management, decide how many licences the school will need to extend ILS use, as appropriate. At this point, having taken the decision to extend ILS use, the school should perhaps discuss the appointment of an ILS co-ordinator and the division of a whole school timetable and whole school policy.

Phase 4

Children return to the ILS; teachers are given further training and specific guidelines to follow.

Phase 5

Review progress of the children after approximately one month; remove any children from the system who aren't making progress. Review any teacher training required.

Questions teachers should consider before embarking upon ILS use

- How am I going to timetable the ILS use? How much time can I make available for it?
 - How am I going to select children to use the ILS? Can I trial children by placing all children on the system and then remove children who don't make progress?
 - How long will I allow children to make progress before reviewing their performance and removing children who haven't made any progress?
 - How will I ensure that I am available if children need my help on the ILS? Is this possible?
 - How will I organise the children to use the ILS?
 - How will I supervise and manage children who use the ILS? How am I going to use the reports to help children?
 - How often should I use the reports the system provides?
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