

# IT Learning System

Knowledge Network® was established in 1994. One of the company's areas of specialisation is the development and implementation of outcomes based, project and goal oriented IT Skills Development Programmes for use by educators.

The system is currently in use in South Africa's top independent and state schools, servicing over 300 educators and over 22,000 learners.

The product consists of thousands of modules of developed, researched and fully tested, fun and challenging sessions on different levels of complexity to accommodate the different levels of learners.

The system covers all grades from pre-school to Grade 12. All computer disciplines are covered including workplace skills, spreadsheets, word processing, DTP, graphics, image processing, programming, web site development, electronic research and communication and multimedia school projects and business presentations.

The system is easy to use, fun to deliver in the classroom and requires minimum preparation time for educators. All educators can use the system, whether or not they have a background in IT. Professional development is an integral part of the system.

A unique learning methodology is used with the system. The learning methodology is called the Integrated Learning and Mentoring Methodology.

ILAMM® enables accelerated learning, development of IT skills while simultaneously developing lateral thinking skills, creativity, logic and problem solving ability.

Cross-pollination of skills develops learner independence in using information technology and ensures that learners are able to move from different software applications quickly and easily. The learning methodology promotes active learning.

The professional development programme offered by the company includes training in the use of the system with the learning methodology.

The use of the system provides flexibility in the choice of study programmes by individual schools and provides learners in Grade 7, Grades 11 and 12 with the skills needed to enter the internationally recognised examination modules on proficiency levels if the system is followed as a progressive learning programme, as well as the Knowledge Network® Diploma in Information Technology (Knowledge Network® Level 05).

## Project based, goal-oriented and outcomes based integrated Information Technology Learning System (IT Learning System)

The Information Technology Learning System is used by schools as either a progressive learning programme for learners and educators, a resource toolkit or for a study programme in a specialised field of information technology such as programming, web site development, image processing or graphics.

## Progressive Learning Programme Implementation

The Progressive Learning Programme provides a unique learning opportunity that expands on the IT skills of the educator and learner while still providing the learners with stimulating and challenging projects to complete. The system includes, on average, between 32 and 46 lessons per year per grade per level:

Primary Schools		Secondary Schools	
Pre-school	46 sessions per year	Grade 08	32 sessions per year
Grade 00	46 sessions per year	Grade 09	32 sessions per year
Grade 01	36 sessions per year	Grade 10	32 sessions per year
Grade 02	36 sessions per year	Grade 11	32 sessions per year
Grade 03	36 sessions per year	Grade 12	32 sessions per year
Grade 04	32 sessions per year		
Grade 05	32 sessions per year		
Grade 06	32 sessions per year		
Grade 07	32 sessions per year		

## Supporting material for the learning system

The system per year includes detailed project and outcomes based Session Plans (lesson plans) for every session, skills assessments and projects. The time per session is between 30 and 50 minutes.

The Session Plans include fun goal-oriented projects, and where relevant, skills assessments for learners and background information for educators. The Session Plans are easy to use, quick to work through during preparation even for those educators who do not have a background in information technology. The sessions make use of popular software such as MS Office, including Word, Excel and Power Point, Adobe, Corel, graphics, web site development software and programming languages, where applicable. An electronic encyclopaedia or the Internet is recommended for research purposes.

The methodology used as the learning methodology for the system is ILAMM® (Integrated Learning and Mentoring Methodology). Learning is accelerated through this methodology.

## IT Learning System Levels

The key to success of the Progressive Learning Programme implementation for both learner and educator is the selection of the right starting level of the system.

## Progressive Learning Programme Levels

Grade / Year		
12	Secondary	5th Year Level 05
11	Secondary	4th Year Level 04
10	Secondary	3rd Year Level 03
09	Secondary	2nd Year Level 02
08	Secondary	1st Year Level 01
07	Senior Primary	3rd Year Level 03
06	Senior Primary	2nd Year Level 02
05	Senior Primary	1st Year Level 01
04	Senior Primary	
03	Junior Primary	
02	Junior Primary	Development of IT Skills,
01	Junior Primary	lateral thinking, creativity, logic
00	Ages 4-6	and problem solving ability
Pre-school	Age 3	

# IT Learning System (continued)

The level selected is dependent on the level of the learner and not the educator. Learners want to progress from where they are at the time of implementation.

Educators are trained to present the level that is right for the learner. If it is established that learners are at Level 03 on implementation, then the system is implemented on Level 03, even if the educator has no background in information technology or an in depth knowledge of the topics being covered in that level. If the methodology is followed closely and educators have attended the session training, it works and has been proven by the thousands of learners currently involved in the programme.

## Professional Development

ILAMM® (Integrated Learning and Mentoring Methodology) for teachers who present the Knowledge Network® IT Learning System.

For schools implementing the Progressive Learning Programme run during the normal school day, there is training in the Integrated Learning and Mentoring Methodology and Session Training per 5 sessions. During the session training, educators are trained to present the session content to the learners.

## Methodology for the IT Learning System

ILAMM® training is 20 hours. The most effective way of delivery of the training for the educators is in 5 x 4 hour sessions. The ILAMM® training works for all teachers, irrespective of their IT or technology experience.

## Session Training for Educators

There are either 3 session training events that are four hours each and twelve hours in total, or alternatively 6 session training events that are two hours each and 12 hours in total, per year.

The first session training event, per level, is at the end of the ILAMM® training programme to ensure that educators are able to start presenting the system to learners immediately on return to the school.

## Customised Courses for Educators

All educators can integrate IT skills into their specialist subjects. Knowledge Network® offers customised courses for educators to meet specific needs they have in the learning environment. Workshops and seminars keep educators current with technological advances within the industry.

## Implementation of the IT Learning System

Schools are currently following one of the two programme implementation models listed below:

### Full implementation

Implementation of the programme for all Years / Grades in the school, including pre-school, if applicable.

### Partial implementation

Implementation of the system for selected years. Partial implementation is generally followed by full implementation in the following term or academic year.

Schools are currently following one of the three educator training implementation models listed below. This is generally dependent on the schools' budgets and long term goals.

### All teachers in the School

This generally applies to the primary school environment where all teachers are trained to present the system to their own classes.

### Appointed IT teachers

This applies to the high school and senior primary school environments where teachers are appointed to present the curriculum to all Years / Grades, i.e. dedicated IT teachers.

### Combination of the above

This applies where schools are combined, i.e. primary and high schools, while at the same time developing all teachers for meaningful, effective and relevant integration of IT in the classroom.

This model would be most effective where the outcome required is a higher standard of output from the learner, accelerated learning through the use of technology tools and measurable increased results in learner scores, development and performance in the learning areas.

The development of other educators in the school for integration of IT in the classroom with the above outcome in mind can be achieved through the Knowledge Network® IT Integration Seminar and follow-on workshops. This provides educators with a structured approach and takes advantage of the skill level of the learners. It works because learners and educators are "in tune" with each other.

Implementation of any one of the above models has been highly successful in their respective environments.

## Why the system works in Schools

- The sessions are designed to suit lessons of between 30 and 50 minutes.
- There is a different learning programme for each year of school, per learner level. The sessions are fully tested prior to release.
- Educators without a background in IT gain IT skills while developing the learners. There is no waiting time for educators to develop skills. The sessions are easy to follow and preparation time is minimal.
- The sessions are fun, exciting, challenging and offer variety for both the educator and the learner.
- The system is flexible. The system can be used as a progressive learning programme or as a tool for educators to use for integration of technology in the different learning areas, or a combination of the two. Educators can change the session briefs to fit in with learning themes or projects.
- The unique methodology used accelerates learning and develops IT skills while at the same time developing lateral thinking, creativity, logic and problem solving ability.