

IBM KidSmart International Software Review

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The IBM KidSmart Early Learning Programme integrates new interactive teaching and learning activities using the latest technology into the pre-kindergarten curricula. IBM's KidSmart programme includes the Young Explorer™, a computer housed in brightly colored, child-friendly Little Tikes™ furniture and equipped with award-winning educational software to help children learn and explore concepts in maths, science and language. Since the inception of the KidSmart Early Learning Programme in 1998, IBM has invested more than \$120 million, donating more than 55,000 Young Explorers to schools and not for profit organisations in 60 countries, reaching more than 100,000 teachers and serving more than 10 million students.

The Young Explorers come equipped with preloaded educational software from Houghton Mifflin Harcourt Company and generally includes the following titles (not all titles are available in all countries where IBM makes donations):

- Millie's Math House
- Trudy's Time & Place House
- Bailey's Book House
- Sammy's Science House
- Thinkin' Things 1
- Teachers Manual/Guide

This study was commissioned by IBM in March 2011 to explore how to enhance its KidSmart programme by providing grant sites with information on software that was freely and commercially available, and which could supplement the software provided as part of the KidSmart grant programme. The objective of the review has therefore been to identify the best free and commercial software currently available that would complement the KidSmart Early Learning grant programme in a wide range of linguistic and cultural contexts. The findings reported below should be considered to represent an expert review as any fully comprehensive review of ALL the early childhood software currently available around the

world lay beyond the scope or budget of the project. IBM commissioned the study but should not in any way be held responsible for any inaccuracies, errors or omissions, and they should not be considered to have formally endorsed the software that is recommended in the report. The research summaries provided in the Appendix to this report include locally produced and translated, free and commercial software from France, Germany, Italy, Netherlands, Denmark, Norway, Finland, UK , Israel, China, India, Argentina, Australia and Brazil.

1. Theoretical Background

The quality of software currently available for early childhood education is extremely varied and much of the material available has been subjected to sustained criticism from those engaged in developing good practice in this area (e.g. NAEYC, 1998; Buckingham and Scanlon, 2003; Siraj-Blatchford and Siraj-Blatchford, 2006; Eagle *et al* 2008). Most significantly, software, whether it has been developed from a Piagetian 'discovery', or a behaviourist 'drill and practice' perspective, has been developed with an assumption of the child individually interacting with the technology in 'solitary play'. As Eagle *et al* (2008) argue:

"What is missing in the design of much software for the early years is an awareness that learning derives from a process of interaction with both the social and physical world....an awareness of the importance of informal and intimate interactions between young children and others around shared physical artefacts."

The sort of artefacts most powerfully envisaged here are the toys, play props and story books applied by early childhood educators and parents with children in shared reading activities. As Yelland (1999) has suggested, well chosen software presents opportunities for young learners to engage in "Playful explorations" and new technologies presenting a "vital new resource for such explorations". There are examples of software that have been designed in these ways to encourage adult-child communication, collaboration and creativity¹. Increasingly adventure games and simulations and software are being developed and adapted for early years settings and primary schools that allow children to create and make decisions and changes in the images, text and sound effects of stories and to support activities away from the screen.

In developing this international review of software, we have therefore been particularly concerned to identify software that affords play and open-ended learning and playful interactions. Gonzales-Mena (2008) has suggested five key characteristics of playful learning:

- active engagement;
- intrinsic motivation;
- attention to the means rather than the ends;
- non-literal behaviour; and
- freedom from external rules.

While much of the available software has been developed for the solitary use of older children, trials carried out in developing the *Supporting Playful Learning with Information and*

¹ See for example <http://www.thelandofme.com>

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Communications Technology in the Early Years (SPLICT) project in Swansea have shown they have the potential to be both stimulating and motivating for younger children to engage in with close adult or older (more capable) peer support. Theoretically this form of pedagogy may be strongly justified in terms of scaffolding learning within the zone of “proximal development” that extends beyond what the partner is capable of doing on their own to include those activities they may successfully do with the support of a more capable other (Vygotsky, 1978). Forman and Cazdan’s (1989, 1998) research also suggests that children’s problem solving improves in collaboration, as the partners alternately provide scaffolding for each other within the partners ‘zone of proximal development’ (ZPD) ³.

A strong case can be made for information and communications technology (ICT) in early childhood simply in terms of the collaborative application of high quality software available in itself (Papert, 1980, 2001, Clements, 1994, 2000, Haughland, 2000, Plowman and Stephen, 2003). But the value of sustained adult-child shared computer activity may also be considered grounded in three more firmly established and evidence based principles of good practice in early childhood education:

- A) Enriched Home Learning Environments (HLEs) in early childhood have been found to significantly contribute towards long term educational achievement. Research has shown this to be true even where children are otherwise disadvantaged due to poverty, limited parental education, income or employment (Sylva et al, 2008). Where freely available software is used in both the home and the preschool, this also provides a valuable additional context for communication between the pre-school and the home.
- B) Enhanced interaction, dialogue and ‘Sustained Shared Thinking’ in early childhood have been identified as strongly associated with children’s learning and development in the home and in pre-school settings (Sylva *et al*, 2010).
- C) Young children have also been shown to benefit significantly from enriched language environments (Snow, 1991, 1998, 2004). There is evidence that early childhood software can support the development of vocabulary and this has additional implications for the development of the children’s language, for inclusion and for bilingual support.

A) *The Home Learning Environment*

The Effective Provision of Pre-School Education (EPPE) study has followed 3,000 children since 1999 and it has shown that children with a positive home learning environment (HLE) achieve better in the early years and throughout their primary school. While the effect of background characteristics such as family income and maternal education on reading and maths achievement diminishes as children grow older, the impact of the quality of the HLE still has very strong effects on academic outcomes at the ages of seven and it is still influential at age eleven. On the other hand, children who have a poor early HLE are already disadvantaged at age three on cognitive scores at entry to pre-school (Sylva *et al* 2010).

²
<http://www.playthinklearn.org/>

³
See also Crook (2003), Wang, C. and Ching, C. (2003)

Although there is an association between the quality of the HLE and socio-economic status, the EPPE study has shown that regardless of social class, families can improve their child's outcomes by what they *do* with their child through an enhanced early home learning environment, which has an independent effect from who they *are* in terms of their SES. As the authors explain:

“What parents do is therefore vitally important and can counteract other disadvantaging influences, particularly during the pre-school period. For this reason pre-school and school settings that do not promote parent support and positive HLEs are considered to be missing an important element in raising achievement and enhancing social/behavioural development over the longer term”. (Sylva *et al* 2008)

In the USA, the High/Scope Perry Pre-school evaluation (Schweinhart and Weikart, 1997), and a number of other influential early childhood studies have shown the value of encouraging parents to contribute to the educational process. The value to parents and children reading books together at home has also been well established (Hewison, 1988, Topping, 1992). Many studies have also shown that when parents, teachers and children collaborate towards the same goals this can lead to improved academic performance of across the curriculum (Siraj-Blatchford *et al*, 2004). Schools also report that children whose parents contribute to their education in the home show a more positive attitude towards learning and are better-behaved in school (Tizard *et al*, 1982; Hewison, 1988; Hannon, *et al* 1995, 2006;).

US research has also provided direct evidence of the effectiveness of applying ICT in the home. McCarrick *et al* (2007) interviewed 136 parents of Head Start children who owned a computer to identify the frequency and type of involvement that they had with their children while at the computer. They found that *young children performed better on measures of cognitive competence (verbal, quantitative, general cognitive, and memory) and school readiness when their parents were actively involved with their home computer use:*

“...the benefits of parental involvement were not observed among children whose parents were passively involved (e.g., watched the child use the computer).”

Similar findings were reported in a similar study involving 237 families reported by Bhavnagri *et al* (2009).

B) Dialogue and Sustained Shared Thinking

One of the key findings of the Researching Effective Pedagogy in Early Years (REPEY) project (Siraj-Blatchford *et al*, 2001), was that adult-child interactions that involved some element of 'sustained shared thinking' may be especially valuable in terms of children's early learning. These are sustained verbal interactions that move forward in keeping with the child's interest and attention. When children are encouraged to initiate discussion and to ask questions we also increase their capacity to learn. Researchers have shown how early literacy may be stimulated through the extended conversations that often occur during practical activities (Snow 1991; Hall and Robinson 1995). Siraj-Blatchford and Manni (2008) also found that young children ask more questions when they are involved in practical activities, and Siraj-Blatchford and Siraj-Blatchford (2006) have shown that ICT provides an excellent context for this. *When we encourage children to initiate discussion and ask questions we increase their capacity to learn, the verbal interaction also moves forward in keeping with the child's interest and attention.*

Computers also provide a means by which young children may be supported in their manipulation of symbols, and representations on the screen allow them to distance themselves from objects in a way that supports the processes of verbal reflection and abstraction (Forman, 1989, 1998, Siraj-Blatchford and Whitebread, 2003). This is a theme specifically addressed by Bowman, *et al* (2001) in the US National Research Council's report *Eager to Learn: Educating our Preschoolers*. The report strongly endorses the application of computers in early childhood:

"Computers help even young children think about thinking, as early proponents suggested (Papert, 1980). In one study, preschoolers who used computers scored higher on measures of metacognition (Fletcher-Flinn and Suddendorf, 1996). They were more able to keep in mind a number of different mental states simultaneously and had more sophisticated theories of mind than those who did not use computers" (p229).

C) Enriched language environments

Hart and Risley's (1995) studies showed that Middle-class parents speak, on average, 300 words per hour to their children, and that the vocabulary gap of children at aged 3 was correlated strongly with their subsequent language performance in the school. *Snow's (1998) 15-year longitudinal study of language and literacy skills among low-income children has provided further confirmation that* children more advanced in developing their reading capabilities are usually found to have been brought up in an environment that has exposed them to significantly larger vocabulary. *The average one-year-old has about 5 words in their vocabulary on average, although some may have none and others as many as thirty At age two an average child's vocabulary is more than 150 words (with a range of between 10 and 450 words). Children have a vocabulary of about 14,000 words at six years of age and the average adult (at age 40) has a working vocabulary of about 40,000 words. In order to achieve this it is clear that children must learn at least a few new words every day.*

The current early childhood educational policy interest around the world in encouraging dialogue and enhancing the language environment of early childhood educational settings is further substantiated from the perspective of psychological literacy which stresses the importance of acquiring and developing a vocabulary of mental terminology and learning thinking skills through communication with others (Taggard *et al*, 2005). Astington (2000) identifies a range of 'mental verbs' related to cognition, desire and perception that provide a basis for investigation of these issues further.

English as a Foreign Language

Multilingual speakers outnumber monolingual speakers in the world's population and most of the world's children grow up in bilingual or trilingual families. As a result of globalisation in recent years a global lingua franca has been sought to serve the needs of intercultural communication between communities. While Esperanto has arguably the greatest potential in serving these requirements, the English language is being increasingly adopted around the world for this purpose. The best policy for developing English as an additional language is undoubtedly through language immersion in early childhood, and in the most effective early learning contexts it is the 'one language - one speaker' model that is applied. In this model, a member of staff is employed to be the designated speaker of the second language and uses this language with all children most of the time:

"Ultimately, the communicative need and desire for all world citizens is to acquire, as quickly as possible, a level of global and cross-cultural communicative competence characterized by tolerance and empathy. Thanks to its current role English seems the best natural and most widely accepted candidate as a global lingua franca"
(Grzega, 2008)

In many contexts early immersion may not be an option and teachers will need to plan a range of activities to support children with activities matched to different levels of English acquisition Siraj-Blatchford and Clarke (2000). For children new to English, computer software may provide a valuable teaching resource. This software should, as far as possible:

- Be play-based and support 'hands on' activities away from the screen
- *Encourage Problem Solving, Reasoning, Communication, Language and Literacy*
- Provide links to learning at home
- Support small group activities
- encourage children to talk, interact, to explore and to engage in socio-dramatic play
- provides nonverbal cues to encourage children to speak in English
- encourage children to listen to others
- provide positive reinforcement
- provide opportunities for children to hear the most appropriate language forms
- model, rephrase and extend the children's language rather than focus on errors.

The development of listening skills is especially important and this will often require the active participation of the adult or parent with the child or children at the computer.

2. About this Report

Each member of the review team was initially supplied with a revised version of the DATEC evaluation criteria that were first applied in the *IBM (2004) KidSmart Early Learning programme European Evaluation*. The criteria now include evaluation of the applications in terms of:

- Educational purpose and challenge (both cognitive, affective and developmental)
- Potential for encouraging playful collaboration between children and between children and adults
- Integration with other aspects of curriculum away from the computer
- Scope for the stimulation of imagination, creativity and active child control
- Meaningfulness, ease of operation and technical 'transparency'
- Avoidance of violence or stereotyping
- Health and safety and the development of resilience.
- Support for parental involvement and learning in the home.

Methodology

Collaboration was sought among academics and other specialists in the field of information technology in early childhood education in each of the review countries. Following initial reviews of professional and research literature, relevant web sites and numerous blog posts around the World a range of titles that were to be considered were identified, and each contributor to the review has used their local contacts to identify other titles warranting review. The suggestions of other IBM Asia Pacific contacts (at least one for each country involved in the review) were also contacted and asked to suggest software titles which they considered of sufficient educational quality to be included in the review.

Argentina	Alejandro Andres Toscano
Australia	Andrew Hocking
Brazil	Patricia Menezes
China	Chen Guy and Nan Cao
Denmark	Payam Zamani
Finland	Ville Viita
France	Isabelle Biadatti
Germany	Peter Kusterer
India	Mamtha Sharma and Deepa Kadoor
Israel	Connie Klein
Italy	Eloisa Borle
Mexico	Carlos Saucedo
Netherlands	Warner Dijkhuizen
Norway	Roar Fundingsrud

A shortlist was thus compiled in each country for more detailed review. A draft review was written for each title by the contributing reviewers (academics and other experts in the field of Early years ICT), and these formed the basis for discussion of both the software and the evaluation criteria as it has been applied in each country. These reviews explicitly addressed each of the criteria above and, following editing to identify the highlights, they are summarised in the Appendix to this report.

3. The Review Findings

A full list of all the software recommended is included in the Appendix. We were unable to identify any systematic review of early childhood educational software in any of the survey countries, and much of the software we identified in Southern Europe and South America were adaptations of English language titles. Where published evaluations were available these were often restricted to an account of the learning objectives being addressed. In any event, in education, as in most other contexts it makes little sense to evaluate a software product in isolation from the manner of its use or application. The following conclusions are therefore strongly conditioned by contextual statements related to their practical application.

We found a wide range of websites and CD-Rom based software that had chapters on early literacy and numeracy often with an emphasis on phonics, reading familiar words and comprehension, reading numbers 1-10 and 1-20, counting and simple calculations. The Israeli site Maya's secret, for example, is set in a child's bed/ playroom and offers 12 separate games, one of which is a Magician's show who gets more and more rabbits out of the hat. The narrator invites the player to count with him. The first criterion we employed in our evaluation was related to the educational value of the web activities and software. However this posed a particular challenge for an international review of this kind as the dominant philosophies and pedagogical practices differ around the world depending on differing cultural needs and preferences. Variations in practice ranges from highly didactic teaching where the learner mainly copies the teacher, to the most extreme child-centred approaches where the teacher is primarily concerned to support the child's self-expression and responds entirely to their individual interests and activities. As Pearson and Degotardi (2009) have argued, the process of globalisation has at times resulted in the uncritical promotion of individualistic child-centred approaches around the world. As the authors suggest, such crude notions of 'discovery' learning have been widely criticised even in American and European contexts where they originated, and in the Majority world, they may

often have been even more fundamentally out of place. In the circumstances the most prudent approach to be taken was one that avoided both extreme position, and that recognised, as noted in section 2 above, that a large body of robust research is now showing us that early education can make a significant difference to the future educational outcomes of disadvantaged children. Pearson and Degotardi cite Barbara Rogoff (2003) in arguing for a 'cross-fertilization of ideas about education', rather than the transfer of hegemonic policy and practice across international contexts:

".... notions of change and sustainability can co-exist if communities are given the opportunity to develop early childhood educational practices which work towards collaboratively formed goals in culturally relevant ways. Innovations can take place, but these innovations need to be meaningful to both teachers and learners if they are going to develop the sense of agency, ownership and confidence required to empower individuals and communities to bring about and positive and sustainable community development". (Rogoff, 2003)

In her Blogs since 2008, [Sinara Duarte](#) from Fortaleza in Brazil provided a review of a range of titles and argued for a strong emphasis on literacy to address the major educational challenges currently faced in Brazil. According to an international review of early childhood education in Brazil (UNESCO 2007), the policy response to these challenges in Brazil have largely been met by 'Early Primary' provisions that have emphasised the early development of formal reading and arithmetic skills. Yet international research evidence suggests alternative, less formal play based active learning approaches are more effective (Schweinhart and Weikart, 1997, Siraj-Blatchford et al 2003, Nabuco, 2006, Nabuco and Sylva, 1995, , Sylva et al, 2009). In the UNESCO study four to six year olds were typically seen in classrooms with rows of chairs and desks, where children faced a teacher standing at a blackboard and spend a lot of their time working on numeracy and literacy drill sheets."(Sect 3.2.17). The report emphasised the need for more resources in early childhood, it argued for greater investment and training of early years teachers and stressed the importance of recognising that:

"Success at school depends not only on ability to read, write and count, but also, and more importantly, on willingness to learn and ability to communicate and adapt to the social settings of school life. If early childhood education lays the foundation for lifelong learning, it is not through helping children acquire specific learning skills, but through helping them become whole persons. In early childhood programmes, playing and interaction are more important than studying and instruction".

In fact the apparent contradiction between supporting formal academic achievements and playful interaction may be considered to be only *apparent*. Given the moderating influence of teachers in practice the contradiction often isn't at all *real*. It should be recognised that however closely some aspects of the literacy curriculum of the past may have been associated with didactic pedagogy, a more playful phonics (such as that provided on the UK Alphablocks website) is equally possible (Siraj-Blatchford and Parmar, 2011). Even in the case of software developed with the specific purpose of developing children's phonic skills, an appropriate, emergent and playful pedagogy can be applied. Skilled early years educators apply software as just one tool among many; they are often also very selective and provide the children with supporting extension activities. Yet software is often evaluated without any reference to its application in practice. A review of early years 'edutainment' software conducted by Vennstra et al (2011) concluded, for example, that Dutch edutainment software was unable to meet the theoretical requirements of the most established principles promoted in the learning and development literature. Brooker and Siraj-Blatchford's (2000) study has also shown how three and four-year-olds can often

themselves subvert the intentions of the programmer by extending their play beyond the screen and into socio-dramatic play; “grabbing’ apples and pears from the screen, begging each other to share them, and licking their lips appreciatively after pretending to eat them” (oc cit).

The introduction of appropriate software within the KidSmart programme that encourages on and off screen play, and maximises the opportunities for language development and sustained shared thinking has the potential to provide a significant intervention to promote more emergent approaches to literacy and playful learning more generally. But it is important to recognise that this may sometimes require the distribution of teacher support documentation alongside the software itself. In a major early childhood ICT intervention across Northamptonshire in the UK it was found that the improvements in the quality of the play experiences provided for the children were not restricted to the computer context: “The teachers were “re-energised by the project’s focus on play and in a number of cases have radically re-assessed what they provide”. (Siraj-Blatchford and Siraj-Blatchford, 2004, 2006)

Software that provides appropriate pedagogical guidance

There are very few software products that provide adequate educational guidance although where this is provided such as in the case of the English 2Animate and Land of Me products this is referred to in the Appendix. A large proportion of the stories in the Dutch Bereslim Boeken site are followed by a software programme in which the ‘player’ is invited to think about what has happened in the story, to consolidate her understanding. There are two new characters – one younger and one older child - introduced here who discuss the contents of the stories, thus modelling discussion to the player. Collaboration and shared thinking with an adult or a more able peer is not prescribed but it is clearly suggested.

Software that has potential when supplied with appropriate pedagogical support

Even where software has been designed to ensure that new pathways to further games open only after the child answers closed questions correctly (for example facts about the life of birds in the German software set Oscar the Balloonist), an adult sitting with the child can adapt this pedagogy. While an incorrect answer provided by the child on their own would lead them to having to re-start the game, an adult or more capable peer is able to provide any support that is required to maintain the dialogue. A more appropriate early childhood approach that emphasises play and creative thinking with an open minded approach to trial and error, re-trial and experimentation is provided by Bereslim Play (a freely accessible section of the Dutch site). Here, the characters in the interactive games make mistakes all of the time, but they have a helper (the Teddy Bear) who appears secretly in a corner, or accompanies them everywhere and tells them how to put things right if they can’t guess it by themselves.

In many cases it will be important to supply the software with pedagogical guidance that shows the early years teachers how they can integrated it into more play based active learning contexts. Arguments have increasingly been presented for adults to interact more with children in their play and above all for adults to be responsive and supportive to children’s needs and potential in a play situation, whether computer initiated or not. Adult intervention is an opportunity for the input of new skills or knowledge to enable the play to continue to develop. Adults who interact with children in their play and adopt an ‘extending’

style which synchronises with the child's own intention promote play as educationally profitable and value play in its own right at the same time ⁴.

A number of studies have also found that preschool educators have been rarely present when children are computing. While *qualified* teachers are more likely to be present at the computer, even then adult support is very rarely extended beyond two or three minutes ⁵. In the majority of cases, adult support is limited to a brief intervention when the children experience problems or require supervision. It seems that most children are left to engage in computer centred activities independently, with preschool educators questioning, instructing and managing only when necessary.

Other software with especially strong potential for curriculum extension

Many of the products with the greatest potential lend themselves to significant curriculum extension away from the computer. In Bereslim Boeken (subscription section of the Dutch Bereslim site), for example, the main aim is to engage children in philosophical thinking about feelings and life experiences. One of the stories in this site explicitly focuses on feelings towards one's family (*Balotje and the Horse* story). Another, *Bear in the Playground*, refers to the loneliness and tendency to bully of the Bear (the newcomer who is different from the great majority).

In some London nursery schools the KidSmart project led by the Islington Early Years Team, used the *Houghton Mifflin Harcourt* games to initiate practical art activities. They made plasticine bugs with coloured buttons for eyes and pipe cleaners for legs, emulating the Build a Bug game within the Millie's Maths House series. The coordinates game in the same Millie's Maths House, inspired children to design and build a Sand Pit Village.

Supporting English as a second or foreign Language

A number of our reviewers referred to the fact that English language software was at times being used to support the development of English as a second language in early childhood. Apparently in Portugal the English language version of *Vou para a Escolinha* (see Appendix) is explicitly promoted by the Ministry of Education for this purpose. The free to download first chapter of the *Land of Me* (Appendix) is also proving to be very popular and not just in the English speaking countries. The following response from Argentina is typical:

"I went to Made in Me and I found it great. So I shared with my nephew of 6 years (he only speaks Spanish). To him the characters were extremely attractive and immediately began imagining adventures and improvise dialogue. The language difference was not a problem to interact with Made in Me. Some aspects to highlight:
- *Very good quality paper material that appears on the site, illustrations and colours are very original.*
- *Excellent layout and design.*

⁴ Tamburrini (1982)

⁵ Siraj-Blatchford et al (2001)

- Very interesting content of the stories, the proposed activities and the integration of knowledge."

The German software Oscar is in both English and German, and the player can choose the language he wants to play the game from the start. For immigrant children, the importance of developing competent levels of spoken language in their new country of residence cannot be overstated. They will then join the learning processes on a more equal footing with their peers and access their future education with increased chances of success. As Hovels (2011) argues software programmes "not only provide a solution for young children with a language deficiency in disadvantaged situations, it also boosts the educational participation of their parents." Hovels refers specifically to the Kidsmart computers and programmes downloaded onto them having been translated into Dutch, and how that offered the children and their parents important new opportunities to learn: 'Bereslim now offers playgroups a subscription that means parents can let their kids play the educational games at home on their own computers.' (Hovels, 2011).

Parent Partnership in early Childhood Education

The value of applying software to support children's home learning environment was referred to in Section 2. In the past this has often been restricted in practice due to the paucity of computer hardware in the children's homes and the high software costs. But in many national contexts these limitations are no longer a significant problem. A number of researchers have also stressed the importance of parental involvement in children's computer use at home (Facer, 2003, Sanger, 1997, Giacquinta, Baucer and Levin, 1993). One of the most important findings has been that the level of children's use of computers in school is directly influenced by their out of school experiences (Facer and Furlong, 2000). Another very important finding of these studies has been that while the children of higher SES families often use educational software, children in lower SES households use the home computers almost exclusively for playing games. Giacquinta, et al (1993) also found that when children used home computers for educational purposes they were highly dependent upon parental support. When children play games they usually play on their own. But Giacquinta et al found that the children who used home computers for educational purposes often had highly involved parents who often worked jointly with their children at the keyboard, offered praise as well as practical assistance with the programme.

In many homes and pre-schools parents and professional educators are already building upon their established 'shared reading' practices in playful learning at the computer screen. However, research by Siraj-Blatchford (2003, 2006, 2008) and Crook (1994, 2003) has shown that there has been very little continuity of ICT experience between the pre-school setting and the home. Other research demonstrates the barriers to learning that are inherent in most of the edutainment software and websites currently offered. Yet adults and children acting as co-players at the screen has shown to be beneficial in a range of contexts.

One important consequence of encouraging pre-schools to work with parents, promoting the use of early childhood educational software in the home may therefore be to raise understanding and awareness of the all of these pedagogical issues and to improve the quality of provision in the pre-schools as well.

Freely available early childhood educational software clearly has significant potential in encouraging these practices. Many commercial programmes also provide guidance and stimulation for activities that may be carried out away from the screen and in home contexts where a computer isn't available. While many software products currently provide little in the way of extension materials there is strong evidence to support their development.

Many preschools already have programmes in place to engage parents in supporting children's learning and state authorities increasingly identify this work as a priority. Bereslim's *Intelligent Tutoring System* provides examples for parents in how to stimulate children with feedback. For example, it shows the kinds of questions they can ask their children when reading bedtime stories.' It seems that in both Belgium and Holland parents' engagement in children's education has already been enhanced and strengthened by the KidSmart programme. Loykens (2011) has suggested that children have benefitted in terms of their language development, and it has also encouraged greater involvement of their parents in their education. Loykens suggests this is because they gain a better insight into what the children are doing in the preschool and how far advanced their language skills have become (cited in Hovels, J. 2011).

In Israel, Maya's Secret, the national early years site designed by the Centre for Educational Technology, offers parents at the time of subscription, a page specifically designed for them, through which parents can support and assess their children's learning. In the UK, The *Land of Me* also promotes fully the parents' engagement. The *Land of Me* provides sets of artefacts such as masks of the characters in the interactive cartoon animations. Children and parents can enact the stories at home; they can also purchase soft toys and books representing the same characters. Many of the games in the software and website researched lend themselves to being emulated and enacted in a real active play. For example in the Hebrew site *Maya's Secret* the magician pulling rabbits out of a bag can be played with soft toys and a hat for example. But unless supporting adults will be disposed to facilitate play around computer games, this will not happen. Bereslim Play games are re-enacting universal child's play such as hide and seek and inspire the player to play the games in real life. The virtuous circle of real active play and computer game can continue to extend the child's learning.

Freeware is particularly useful in an early childhood education context because its use in the pre-school can be supported at home (where a laptop or computer is available) more easily than if that required the purchase of additional software. Three free software programmes in particular offer enormous scope for the development of home-preschool collaboration within the KidSmart community: TuxPaint, GCompris and SoupToys. The major advantage of the first two of these products is in the number of languages they have been translated into, and it is for this reason that we review them more fully below rather than in the Appendix. The other resource worthy of special note in this context is SoupToys which despite having been produced in English, has a good deal of scope for use in different language environments due to its highly intuitive design (See Appendix). TuxPaint provides an open-ended resource with potential to provide endless opportunities for playful engagement and collaboration, only limited by the user's imagination. While, the "blank canvas" provided by this tool could be seen as a problem to some adults who prefer a more directed or "programmed" approach to software, GeoCompris also provides a complementary alternative.

Conclusion

The software we recommend is listed by country (not order of preference) in the appendix. It was reviewed by academics and other specialists as indicated in section 2, pp. 6-7 'About this report'.

In addition, we strongly recommend that the use of these free to download products are promoted within the international Kidsmart community and that the download details are provided along with practical ideas for collaborative activities that the

children may complete in their preschools, and at home in collaboration with a more capable sibling, an adult, parent or other caregiver.

An example of this would be for parents to play with their child at home using the **Gcompris** game involving the identification of different coloured ducks. This could then be followed up in the preschool with colour sorting activities, the use of coloured ducks (or other objects) in the children's water play. The Gcompris mosaic making activity at home could also act as a valuable prelude to the creation of patterns with paints and potato printing in the preschool. Another example might be parents using **TuxPaint** with their children to paint faces that each show a particular feelings being expressed. These could then be discussed in the preschool and a wall display could be used to report on "What makes me happy", "What makes me sad" etc.

Bodrova and Leong (2007) argue that early childhood educators should intervene in children's play to improve its quality but in doing so they should avoid being directive. They refer to the importance of making sufficient time for play and the provision of ideas and props for supporting and extending play (p146). Gender differences in play provide concrete evidence of the developmental potential of encouraging different forms of play as girls gain significant developmental advantage from their enhanced exposure (through their mothers) to conversations related to 'feeling states' (Dunn, *et al* 1991).



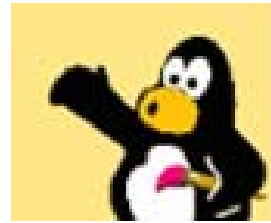
⁶
Souptoys provides an assortment of different categories of object to be manipulated and arranged on the desktop. These include 'sports', 'castle' (blocks), 'souper six' (figures and cars), 'bumble party' (balloons and flowers). What makes the toy so much fun for children and for adults is the fact that they all interact with one another on the desktop. They make noises, balance or fall over. Balls bounce, balloons float into the sky and magnets lift metal objects and the

interactions teach children about the world around them. There are infinite possibilities for parent – preschool partnership activities with SoupToys. For example, parents might co-design and build virtual block castles (or Fairy Palaces) with their child at home. This would provide a rich context for dialogue and sustained shared thinking in itself. The final screen prints of their designs can then be brought into the preschool and reproduced in play with real blocks and construction apparatus.

⁶
<http://www.educational-freeware.com/freeware/souptoys.aspx>

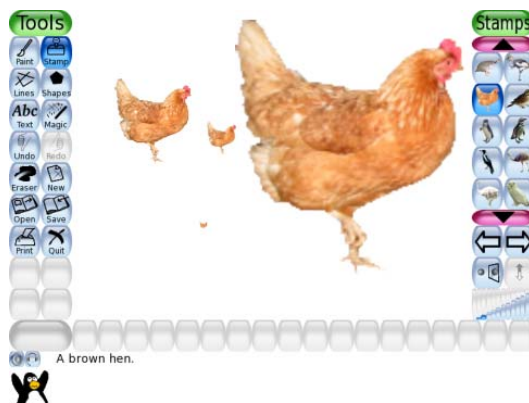
⁷ **TuxPaint**

TuxPaint has been translated, or partially translated, into 85 languages. Children like the penguin and often relate it to Pingu, a favourite TV cartoon character. Tux paint is an open-ended representational tool for creative drawing or image making with a range of creative tools, including paint, stamps and magical markers (such as grass, or smudge). The software affords a range of purposes, from completely open-ended drawing (e.g. painting on a blank piece of paper) to using pre-made, or teacher uploaded, backgrounds. The software is open-source and allows users to add features, such as uploading images to the stamps collection. While the software already somewhat dated, having first been developed in 2002, the regular updates (and stability) adds to its appeal. The use of symbols to represent key technical features (saving, printing etc) enables ease of operation for young

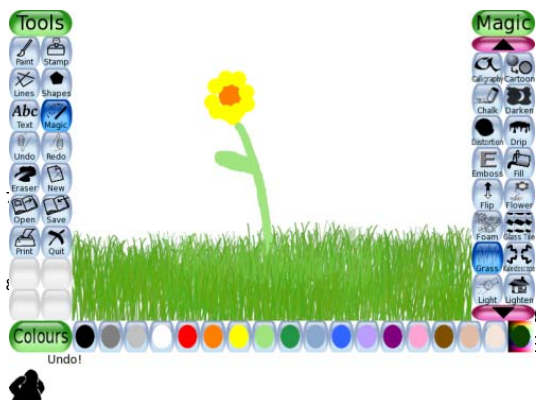


⁸ learners. It also works effectively where multiple inputs are possible, for example on multi-touch interactive whiteboards. Tux Paint can be integrated with other games and educational activities for school projects and children can also use it to share their experiences out of pre-school. It can provide a valuable resource to start, or to complete or close other activities (e.g., making cards for invitations, posters for classroom, tags to identify objects, reporting on activities etc.). It is also a good resource for beginning literacy (children by start putting their name in the pictures, naming objects, and differentiating between the picture and the writing).

The software's sound effects are appealing and engenders an affective reaction from most users, with young learners particularly enjoying "seeing and hearing" the cause and effects.



Tux paint – the child can use pre-installed stamps to change the size to indicate “huge, normal, small or tiny. Activities like this might be associated with particular stories being read in the preschool such as *Jack and the Beanstalk* or *The Enormous Turnip*.



Tux paint empowers the child to be creative – here a 5 year old child's sunflower image has been created using the paint tools and “magic”

youngest children in terms of fine motor skills and the use
e.g. <http://www.chestercreek.com/mice.html>

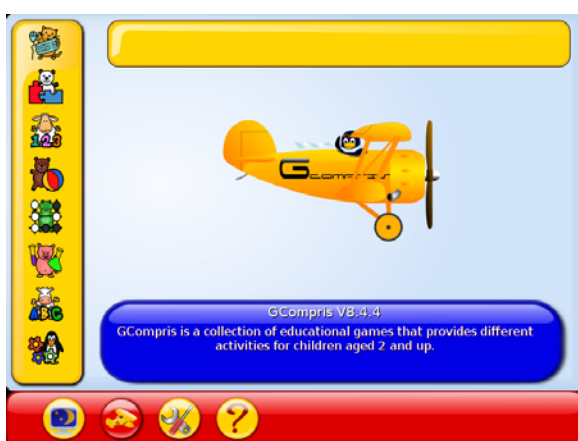
grass” – a tool that quickly draws many blades of grass as the child moves across the canvas.

As the software is a free download and is available on all platforms it is already a popular choice for parents for use in the home. The visual and intuitive interface supports parent involvement as well as independent play.

GCompris



GCompris has been translated into Arabic, Breton (Brezhoneg), Danish, German, Spanish, French, Italian, Dutch, Norwegian, Polish, Portuguese and Brazilian Portuguese, Russian (русский), Slovak (slovenščina), Hebrew, Swedish, and Greek.



Gcompris includes many classic puzzles such as tan grams and jigsaw puzzles. Most would be fairly challenging to younger children and they would need to be explained to them first. While on the face of it this may be considered by many to be a disadvantage, ironically it will often provide a greater stimulus for adult-child collaboration. There are puzzles, mathematical games associated with counting, arithmetic, and geometry, pre-reading and discovery activities. There is also a stop-action animation activity where the child uses various drawing tools to draw a story scene, she can then click on the camera icon to take

a picture and can save it as a single frame of animation. Once the picture has been taken, the child can move things around in the scene and take the next frame. Finally, they can play back their animation.

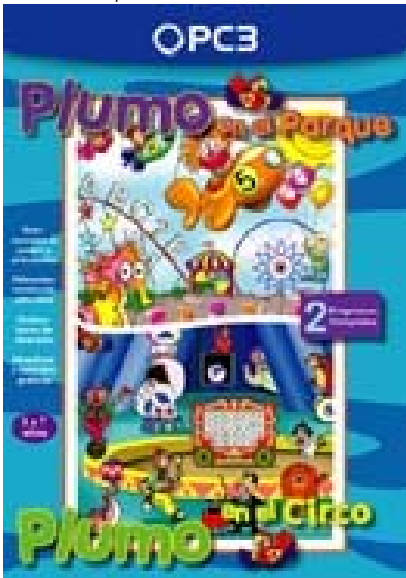
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Title	Web Site	Description	Evaluation
Argentina (Español)			
Plumo en el parque (PC3) http://www.pc3.com.ar/PC3/Programas.aspx?Rubro=2&Sub=1 Price: US\$ 10		<p>These two packages provide different games that support children in :</p> <ul style="list-style-type: none"> • Recognising Colours; • Recognising geometric shapes; • Following logical sequences; • Understanding spatial relationships; • Recognising letters; • Counting objects; • Knowing the order of letters; • Identify similarities and differences; • Learning names of objects; • Setting series of objects based on their actions; • Sorting objects according to size and colour; • Completing pictures without a model; • Relating objects according to shape; • Learning the alphabet; • Merging sequence of colours and shapes; • Locating animals depending on their colour; • Make distinctions using different criteria; • Recognising symmetries; • Consecutive order of 3 to 7 years. 	<p>It is easy to operate and very clear. Through the different activities that are proposed it could promote knowledge in relation to their own bodies, spatial relations, chronological order and many cognitive functions.</p> <p>It offers some cognitive challenges in a lot of different problems, although this is not in a very creative way. There is only one exercise that provides a real possibility of promoting creativity; where the child must dress a clown with (already done) clothes and accessories and then the child must discover the differences between his clown and other that is presented.</p> <p>It is also unclear how it would encourage playful collaboration between children and between children and adults. It does not encourage children to play together unless the teacher mediates in order to share the problem solving ideas, and the using of the computer to indicate the solutions. Cooperative working that may be supported.</p> <p>It is therefore to be recommended for use with pedagogical support.</p>
Plumo en El Circo (Plumo in The circus) http://www.pc3.com.ar/PC3/Programas.aspx?Rubro=2&Sub=1 Price: US\$ 10 Supermarket JUMBO http://www.pc3.com.ar/PC3/Programas.aspx?Rubro=2&Sub=1		<p>It is a game developed to be played mainly alone, and suggests a behaviourist approach to learning with little possibility for creation or construction by the children.</p>	

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Title	Web Site	Description	Evaluation
mas.aspx?Rubro=2&Sub=1			
<p>TuxPaint (es) and GCompris freeware have both been translated into Spanish</p> <p>Australia (English)</p> <p>SoupToys http://www.souptoys.com/ Price: free</p>  <p>http://www.softsea.com/review/SoupToys.html</p> <p>http://www.pcworld.com/downloads/file/fid.84317/description.html</p> <p>http://www.snapfiles.com/get/souptoys.html</p> <p>http://download.cnet.com/Souptoys</p>	http://gcompris.net/	<p>This software package presents a virtual toy box. Toys range from floppy teddy bears, to balls and marbles that drop from a marble machine. Musical toys and a range of “cause and effect” toys are also included in the package.</p> <p>The virtual toys offer a range of interaction types, with many of the toy’s on screen behaviour mimicking that of real objects off-screen. For example there are a range of balls, with extremely bouncy balls through to balls that hardly bounce at all. Gravitational forces and velocity act on most toys in the toy box, with the exception of toys that fly (such as helium filled balloons, or a flying saucer) – this means that if you “throw” a ball by flicking it across the screen the toy’s speed of movement and distance travelled is dependent on the force applied.</p> <p>The children have the opportunity to problem solve and investigate, for example examining cause an effect, making musical patterns or considering the virtual reaction of toys when compared to real world interactions. Some</p>	<p>http://tuxpaint.org/</p> <p>Most adults find this software charming. Many toys replicate items familiar to adults and so a natural sense of play is often instigated by the tool. The open-ended nature of play facilitated by this tool appears to also cater for a range of learners, with children able to play with other children, older siblings peers or adults. The simple user interface and limited text menu system facilitates interaction for novice users and young children with minimal mouse or navigational skills required.</p> <p>The software is further enhanced by the potential to save and revisit play creations.</p> <p>A range of curriculum opportunities are available from this tool away from the computer. In particular children often appear to continue play with this software off-screen in “design and make” type activities, planning play sets and designing motion pathways or marble tracks. A word of warning here is that some teachers present concern that children’s onscreen behaviour (e.g. dropping or throwing toys) may</p>



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Title	Web Site	Description	Evaluation
	/3000-2102_4-10551080.html	children may also engage in numerical discussions and mathematical comparison such as “I’ve got 5 balloons” or “my ball bounced really high, higher than that other ball”. As this toy is a free download there is ample potential for parental involvement and at home play.	be replicated off-screen. While this was not observed in children’s play this is a potential concern. The scope for stimulation of imagination and creativity when using this tool is broad. Active child control is facilitated and supported and the open-ended nature offers an extended range of play opportunities.
World of Zoo	http://worldofzoo.com AU\$9.95 BlueFang / THQ	<p>The educational purpose of the game is as a simulation, where the children simulate the creation of various zoo exhibits. Within this framework children develop skills and conceptual understandings of animal care and behaviour with potential to engage in discovery learning and develop perseverance.</p> <p>In game play, the children earn “zoo dollars” by caring for animals and their habitats. Collection of zoo dollars enables users to unlock more exhibits, toys and tools. The children are required to move through a series of levels to become the “ultimate zookeeper”.</p>	<p>The simulation presented in this software is both its charm and its main weakness. Some aspects of the game effectively mimic real life with real-world animal traits and requirements for appropriate care portrayed accurately. Other elements of animal behaviour are dramatisations of real-world activity for example; Koalas are rarely seen galloping after blow up beach balls.</p> <p>The game is most suitable for children when co-playing with older children – or when playing with an adult. The surprisingly endearing actions of the animals appear to appeal to both adults and children. In addition as the menus are significantly text based, support from an older child or adult is often needed.</p>
2 Animate	http://www.2simple.com/ Price: AU\$85 (also known as PurpleMash on online subscription platform)	<p>This software tool is open-ended and constructive. Using this tool children are able to draw (using a limited colour palette and range of drawing tools) images in sequence, placing them in a “filmstrip” to construct simple</p>	<p>The educational purpose and challenge is dependent on user engagement and associated tasks. The linear sequence presented by the film strip presents a challenge, with children required to order events and present a logical sequence.</p>



<http://childrenstech.com/blog/archives/tag/science>
<http://www.common sensemedia.org/game-reviews/world-zoo>
<http://www.thq.com/us/game/coverage/5293/1>

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Title	Web Site	Description	Evaluation
	http://www.expertreviews.co.uk/software/64630/2simple-2animate http://softwareforlearning.tki.org.nz/Products/2Animate	<p>animations. In addition to drawing animations children can use photos (either pre-taken or captured through the software tool using a web-cam) to construct simple time-lapse and stop motion animation sequences.</p> <p>Children are also presented with opportunity to “speed up” or “slow down” the presentation of images, with the use of simple iconic buttons enabling even very young users.</p>	<p>As with many constructive tools playful collaboration is dependent on the user, with learning and engagement predominantly child directed rather than facilitated by the tool specifically. Collaboration is somewhat supported by the potential to save and re-visit animation sequences, further collaboration is afforded by the ability to export and email animations in a limited range of file formats.</p>
<p>The Wiggles Big Red Car http://www.wiggletime.com Price: AU\$19.95 Dataworks</p> 	<p>This simple software package has strong links to “The Wiggles” an Australian children’s music group. Within the software package all characters presented, music</p>	<p>This close link to commercial media serves both to limit the potential of this tool, as well as act as an incentive to many young children who have prior experience with the group’s music and television show and enjoy accessing familiar content.</p> <p>The software has two modes: story mode and game play. Within story mode children drive the “Big red car” around a map, collecting people and completing simple tasks in preparation for a party. In game play mode children choose the games they’d like to play and have free choice in selecting the game and the level of play (simple, medium or hard). There is a range of educational purposes presented throughout the series of mini-games. These include development of mouse skills (hand/eye coordination), sorting, mapping, classifying, counting, sequencing, language and vocabulary</p>	<p>The simple interface and instructions means that young children can engage with the tool with limited support but this in turn means that there is reduced need for collaboration. The pre-set games presents a structure to play and engagement through rules based games – this could be considered problematic if a traditional definition of play is adopted. However, observation of children’s use of this tool would suggest playful interaction is possible and as game selection is through free choice rather than a series of levelled structures child control is increased and as such potential for playful engagement and free choice increased.</p> <p>This software package presents scope for curriculum integration away from the computer, particularly with potential to integrate familiar music.</p>

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Title	Web Site	Description	Evaluation
and activities link to content by "The wiggles" television show.		and simple comprehension. Many activities focus on healthy eating and while this emphasis could be considered somewhat tokenistic its inclusion aligns with "The Wiggles" ethos and presentation of educational content throughout the group's music, television and performances.	Most (but not all games) in the package also present scope for children to replicate and extend play to off-screen contexts
Gcompris and TuxPaint freeware are available in English		http://gcompris.net/	http://tuxpaint.org/

Brazil (Português do Brasil)

Já Está 2

(CNOTINFOR)

<http://www.educ.fc.ul.pt/docentes/icnagas/ticc/c-26outubro.htm>

is priced at €55,35 and the branded IMAGINA in Portugal, Brazil and Angola.




The software may be considered rather like an Office suite for children, but, at the same time, it provides an integrated multisensory learning environment, which has the potential to promote self-expression and creativity and to support the child in collecting and organising information and present results. The package includes a Didactic tutorial for the application and a kit of 100 educational activities to be promoted with it. There is also an on-line community, upon registration, at www.imagina.pt, that gives support to the users and from where it possible to update with new templates and proposals of activities (<http://atividades.imagina.pt/tag/ja-esta-atividades>).

There are four types of activity supported by the software: Writing; Counting Graphs Drawing


In terms of its educational purpose and challenge Já Está may be considered to have been developed to provide a simple educational technology to support teaching and may also be applied to support 4 to 10 year olds in developing their first ICT skills. The use the software by children individually and in groups supports their development of basic competences for the use of a computer. In its basic configuration, Já Está is very intuitive and easy to use by a children, even the more young ones.

While the software provides little facility for encouraging collaboration or operation by two users at the same time, it certainly provides the potential for small groups of children with adult support to solve problems, finding differences, write a letters, draw etc...

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Title	Web Site	Description	Evaluation
	http://www.imagina.pt/produtos/software/pre-escolar/ja-esta/ http://www.imagina.pt/downloads/software	The 1 st version of Já Está also included a fifth activity – the turtle, which is no longer available in this version.	The integration of Early English learning is also possible as the application is promoted by the supplier in its English version. ¹
<i>Vou para a Escolinha</i> (Porto Editora) (the original version is by Dorling Kindersley, UK, and published in Brazil under the name " My First CD-Rom: Getting Ready For School"). http://www.portoeditora.pt/produtos/catalogo/ficha/id/132954# Price: €8,90		<p>It is structured on six amusing games and adds pedagogical support, for the initial learning of letters and numbers. It also provides support for the development of logical thinking.</p> <p>The games are:</p> <ul style="list-style-type: none"> • The Wheel Master – requiring coordination and logic, using directions provided by the mouse or keyboard to drive the truck to the sand. • Playing with patterns • Easy Counting – clicking on the objects to count them. • Flying alphabet - writing letters with the mouse. • Numbers' eater – recognizing the numbers as given, then a child must drive the frog to the right number to eat it. • Letters and Bubbles - word-sound identification, selecting the objects which name starts with the given letter. <p>Apart from the specific cognitive objectives identified, the application also promotes the use</p>	<p>The software has been developed for children from 4 to 6 years old, assisted by their parents or educators / kindergarten teachers. The CD introduces children to pre-school activities, and it provides educators with valuable information about children' learning development.</p> <p>Parents and educators are encouraged to participate and play alongside the child. There is a parent guide – Parent Book for each game including three parts: Notes about Learning and resume of progress of the child; Personalize the Game to change difficulty and other definitions of the game, such as speed, nr of words, maximum values of the numbers, ...; and Activities to Print, which are very similar to the ones in the game.</p> <p>The application is primarily intended to prepare young children in their first school competences: reading, counting, writing, logics and coordination. However, due to the variety of situations and objects used in the games, it will be possible for educators/parents to integrate</p>

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Title	Web Site	Description	Evaluation
MiniClicks (Porto Editora) http://www.sitiodosmiudos.pt/57/		<p>of computer and peripheral hardware and encourages the child to sing and rhyme along with the mascot that guides the playing process</p> <p>The website is organised in 9 sections of activities, each symbolized by one animal:</p> <p><i>Watch and listen</i> – video clips of children songs with subtitles to follow the music, like karaoke.</p> <p><i>Environment</i> – description of different animals, with interactive storyboards for the anatomy, with a narrator and comic animation.</p> <p><i>Hands at work</i> – ideas for things for children to make</p> <p><i>How does, how it is done</i> – 4 story boards with narrator who tells the day of the correspond profession.</p> <p><i>Learning with games</i> – 12 games, interactive, fun and oriented for basic competences in early childhood: painting, dressing, special coordination, memory, categorization, problem solving,...</p> <p><i>Ideas for me</i> – instructions and suggestions for parties, games, toys and presents</p> <p><i>Growing reading</i> – 4 stories animated, learning the letters and suggestions of books.</p> <p><i>Let's move</i> – descriptions and instructions for physical games.</p> <p><i>Did you know...</i> – some curiosities organised in themes, presented one by one.</p>	<p>other areas of learning away from the computer, such as Nature and Environment (animals, landscapes, weather...); body and health etc.</p> <p>The website is very attractive and the children are encouraged to explore and experiment with the buttons. It is also very clear and intuitive. The interactive situations are clearly visible and it is easy to find the effects.</p> <p>Sports, crafts and reading in books are promoted in the activities, by presenting guides and suggestions for learning and fun without ICT. Most of the activities have a option for printing, suggesting the use of the content in situations away from the computer.</p> <p>A lot of activities are to be performed offline, using the guides provided. Those activities are opportunities for learning and playing together with adults; e.g. building a lantern, baking cakes,... and suggestions for readings offline (books).</p>

<http://www.portalis.co.pt/sitio-dos-miudos/>

<http://www.educatic.info/noticias/sitio-dos-miudos>

<http://www.jogosinfantiseducativos.com.br/ola-mundo/>


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Title	Web Site	Description	Evaluation
TuxPaint (pt_BR) and GCompris have been translated into Brazilian Portuguese		http://gcompris.net/	http://tuxpaint.org/
China (Simplified Chinese)			
Wawayaya Happy Pinyin (Hansvision) http://www.wawayaya.net/en/ Price: S\$33.00		<p>This software is for learning the pinyin (standard Romanized script for Chinese words). For preschoolers to use the software there should be an adult or someone who know Mandarin to guide them along. This is because all the instructions are in English. After using the software for a few times children would have no problem using individually and independently. The Magical Fruit Village and Challenger's Champion camp have many cute animations which children can relate to</p> <p>User should start with watching VCD, to know the basic pinyin system, then proceed to the learning activity CD which children can use the games and activities available to reinforce their pinyin knowledge.</p> <p>In the software, at the main menu, there are messages for parents/adults to let them know each game/activity focal point and thus able to teach children more effectively. The messages are all in Chinese and this will be difficult for parents who do not read Chinese.</p> <p>There is a segment in the learning activity CD which allows the user to record their voice and replay it to combine with the song sung by the characters in the video. Teachers can use this method to record children's voice while they are reading Chinese words or books, then let them</p>	<p>When playing the games, children can discuss together which the correct answer is. The games and activities provide many opportunities for children to discuss their new knowledge.</p> <p>The teacher can use the activity book included to reinforce the knowledge children learnt from the software. Other than learning software, children can also exercise their hand eye coordination and fine motor skills.</p> <p>The edutainment CD brings children into a Magical Fruit Village. Teacher can also create a similar fruit village in the classroom and zoom into the different parts of the village for different focal learning each week.</p> <p>There is no need for any installation. Once the user inserts the CD and let it Autorun, the program will start. Then after watching the intro clip, user can just click on the option preferred and start right away. If technical support is required, user can just email to</p> <p>In each activity, there is a cartoon character which is there to assist children when learning or playing the games. This animated character uses very encouraging words which helps to spur children on to try even when they do not click the correct option.</p> <p>The software encourages parental involvement.</p>




Although Wayayaya Happy Mandarin Pinyin is a very useful software, but it is not easily available in many places. Only Creative technology Headquarters sell this product. Another way of acquiring it would be through China online purchase website.

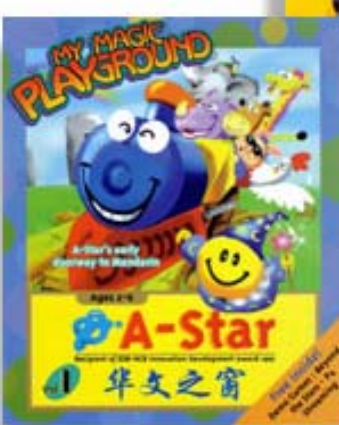

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Title	Web Site	Description	Evaluation
	http://item.taobao.com/item.htm?id=2078623983	recap and review is their diction and pronunciation is accurate.	Even parents who are not too good with pinyin are able to improve their knowledge through using this software. Pinyin is very useful when doing Chinese word processing.
	Internet review websites and any other references: http://www.haidongji.com/2006/02/02/wawa-yaya-is-great/		
Seven Coloured Flower (Hansvision) http://www.wawayaya.net/en/softdetail3.asp?id=500116 Price: \$23		<p>The package includes VCD, CD and software CD. The software included reinforces children's learning. The activities in the software CD include</p> <ul style="list-style-type: none"> • Games • Picture sequencing • Story in E-book format - so that children can listen to it and read the Chinese characters on the screen. • Creating own story – Children can use this feature to put in clipart to the scene they. They can then record their story using the RECORD feature. <p>Children can learn Chinese from watching the VCD of the story then venture into more depth about the language through activities. After showing the VCD, teachers/parents can discuss the story with the children about what they would do if they have Seven Coloured Flower.</p> <p>During the initial usage, a teacher/parent has to be there to explain the different segments to the children. This is because all the instructions are in Chinese. Once children are familiar with the software, they are in total control. The story encourages children to think about</p>	<p>As the software CD is child friendly, children can just insert CD in the CD tray of the computer and let the software run. Story sequencing encourage discussions amongst children to get the correct sequencing. In the story maker, children can work together to create a self-made story which can be displayed as e-book with voices or teachers can also help to print out the story.</p> <p>The story can be extended into other parts of curriculum: art and craft, creative writing, multimedia learning. The story also teaches children about being empathy.</p> <p>Children can create their own Seven Coloured flower. Each petal will represent their own wish that they would like to fulfil. Teacher can also help children to write down in sentences the story that they narrate in the software.</p> <p>just need to insert the CD and the software will run. There is no need for installing the software. The story encourages empathy; to be sensitive and helpful to the less fortunate.</p> <p>Parents and children can watch the VCD together. They can learn Chinese together with their children. Parents can help their children when they are recording their voice narration for</p>


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Title	Web Site	Description	Evaluation
		what they will do if they have the Seven Coloured Flower.	their self created story.
Word Express 字宝宝 (e-com media) http://www.etutoronline.net/		<p>This software consists of Chinese characters which children will learn in mainstream primary school. It is a preparatory programme for pre-schoolers. Children are able to learn the strokes and meaning of Chinese characters through the easily understandable animation and narration. It would be good if the software include simple animated games for children to learn Chinese characters. The simple games are included in their online package.</p> <p>As the program is easy to use, any user with computer is able to run and use it easily. Parents can help children to keep track of what they have learnt and prepare a record book for their children's learning.</p>	<p>Children learn Chinese characters together and learn the pronunciation through the software. They can have a competition, to see who can move up the level. Each level consists of different Chinese characters.</p> <p>Teachers can teach children the art of Chinese calligraphy when they have learnt the correct way of writing the words.</p> <p>During Chinese lesson, teachers can also encourage children to form their own sentences from the words they learnt in the program.</p> <p>Children can compile the words they learn into a mini dictionary.</p> <p>It is very easy to use the software. User just has to insert the CD and the program will run. Thus children can use it even without the help of adults.</p>
 <p>Internet review websites and any other references: http://www.pcworld.com/appguid/e/app.html?id=899430&expand=false (additional apps for Iphone)</p>			
My Magic Playground (A Star Interactive) http://www.a-star.com.sg/ Price: S\$30.00		<p>The software is based on various topics: Weather, colours, Animals, Stories, Mid-Autumn Festival. It helps children to develop understanding of these topics by providing multimedia learning. Children learn in a fun and easy to learn way as it there are a lot of sound and animation. But, due to the fact that the software is developed many years ago, the animation is not in high resolution.</p> <p>When playing the interactive game, children can</p>	<p>There are quite a few opportunities for topic extensions in the program. In the segment weather, teachers can expand the topic further to discuss about how clouds are formed, and the water cycle can also be discussed.</p> <p>In the program there is a song about raindrops, it can be incorporated into the water cycle topic. It is easy to run the program. Children just have to insert the CD and the program will run. Other than learning Chinese, there is an English</p>

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Title	Web Site	Description	Evaluation
		<p>discuss with each other to get the answer. There is a segment which allows children to insert clipart into the background provided; children can discuss to create a piece of artwork which complies with the topic. The scenes in the software include outer space, jungle, farm and many more. There is an animated and narrated story in the software, adult can help children to recap the sequence of the story and discuss about the moral of the story.</p>	<p>version of the program. This is bilingual software. When children attempt the interactive game, if they click at the incorrect answer, there will be a tone to indicate that the choice is incorrect. The tone is not harsh that would discourage children from trying the software further. As the software is easy to use, parents can use it together with their children. This will help instill further interest and parental bonding with their children.</p>
<p>Creative Graphic World Shareware http://www.onlinedown.net/soft/97865.htm</p> 		<p>This Creative Graphic World is a set of creative drawing painting children's creative multimedia tools. The software provides a complete drawing tools and graphics capabilities, and integrates a variety of effects extensions cartoon gallery with rich resources. Based on the child's awareness of and use of software features, the software provides easy to use "magic pen" "magic wand", "scratch" "seal," "People decorate" "custom path animation" and other functions, enabling the creative process has become more relaxed, happy, magical and fun!</p>	<p>It is easy to use software with tools that can help to cultivate children's creativity mind, spatial awareness and initiative learning.</p> <p>Use creativity to help develop children's drawing the world's spatial thinking and creative thinking skills, improve children's learning initiative and enthusiasm to play the purpose of entertaining.</p> <p>http://news.newhua.com/news/2010/0109/83302.shtml</p>

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Title	Web Site	Description	Evaluation
Fairy literacy Paradise - Child Literacy Software 1.6.0.4 		A fairy tale park from Sunflower Network Technology Co. Ltd. China designed for 2-8 years old children. It is free to download literacy software, but they are required to pay for more advanced learning. It provides a fairy tale magic world of fantasy literacy games. Children here, there is a level of their own, where every child is encouraged to help each other, learn together.	Fairy tales, so that children can have fun learning! When playing the games, children easily know their mistake by looking at the animation and the sound effect that prompts that there is an error. http://www.33lc.com/soft/3332.html http://abcd.skycn.net/comment/comment.php?softid=65650
Freeware TuxPaint has been translated into Simplified Chinese (zh_CN)		http://gcompris.net/	http://tuxpaint.org/
Denmark (Dansk) ABCiTY www.abcity.dk		The host characters are a Green Dragon and a boy. The boy travels by rocket through the Universe: each planet offers different activities. Not all of these are developed fully. On one of the planets there is an amusement park with 5 venues: a clothes shop, a bike workshop, a teapot house and a gym. Each of these venues hosts activities related to the 'shop' with practice in calculations in number and reading letters and words. The educational aims include: <ul style="list-style-type: none"> • reading words on sight, letter and sound recognition (phonological awareness), listening, identifying consonants and vowels and reading numbers (in the gym). • exposure to letters and numbers (falling with the paint drops), and much cursor control (IT) 	Marking success: the player accumulates scores marked on side of screen. Games can be repeated without limits, repetition is encouraged and practice will improve performance: the player will achieve higher scores. Its potential for encouraging creativity is limited: graphics and host characters are creatively constructed and designed, but the player has no opportunity to be creative. Some games inspire investigation and a degree of courage: the paint cave is scary in visual and sound effects (large monster drips paint). Games can promote collaboration and shared thinking between children and peers or children

Price: 1 month = 60 DKK
 (Danish Crona (2 Crona per day)
 3 months = 135 DKK (1.5 Crona)


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Title	Web Site	Description	Evaluation
per day 12 months = 365 DKK (1Krona per day)		<p>in 'teapot' house</p> <ul style="list-style-type: none"> • calculation (addition) involving 2 digit numbers- the total of the bill • IT practice: mouse control, fast reactions, arrows on keyboard. 	and adults. However, adult input is not needed: all instructions are clear in Danish, and re-explained by the dragon who acts as the more-able peer, if required.
Miniklub http://www.miniKlub.dk 		<p>Under sea adventures with host crab dressed in Mexican attire and dolphin (the player) who goes on adventures.</p> <p>The player can choose: 1,2,3 games; ABC games; Fantasy games.</p> <p>There are several places the dolphin can go to, as the choice of player: ship wreck, cave, in a underwater classroom led by a Pink Octopus.</p> <p>The educational aims include:</p> <ul style="list-style-type: none"> • reading and ordering numbers to 100 (at various levels of difficulty) • counting 1-20 • addition to 20 • knowing the difference between letters and numbers 	<p>The addition trials are visually explicit and the graphics of these games are inviting. Answers are chosen by player from a choice of 3. Each game can be repeated without limit and the games get progressively harder.</p> <p>The programme's design and concept is highly creative and aesthetic with gentle accompanying sound. For the player there is creativity in thinking and solving problems.</p> <p>It is playful and inclusive: the characters being under water creatures are gender/ race/ ability neutral. The instructions are clear and the crab stands by to explain if the player is stuck. The player has many (endless) opportunities to think.</p>
TuxPaint (da) and gCompris have been translated into Danish Finland (Finnish) Lukimat matematiikka http://lukimat.fi/matematiikka		http://gcompris.net/	http://tuxpaint.org/
TuxPaint has been translated into Finnish (fi)		<p>Games in number work: counting objects 1-10, reading numbers 1-10, recognising sets of objects by sight – groups of 3, 4 or 5, matching numbers to 10 to these, sorting and classifying</p> <p>http://tuxpaint.org/</p>	<p>Recommended but unable to view programme – demo unavailable on site.</p>

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Title	Web Site	Description	Evaluation
France (Francaise) Poisson Rouge www.poissonrouge.com Price 20.5 euros		<p>The site contains 12 programmes from which selected are the following:</p> <p><i>The piano</i> - music composition, recording musical patterns</p> <p><i>Rocket flying to Mathematics Planets:</i> pattern and shape matching, addition, recognising and matching 2 digit numbers. The latter is an exercise of matching the total to sums involving 4-5 numbers.</p> <p><i>10 French and English nursery rhymes</i></p> <p><i>The alphabet</i> in 6 languages: French, English, American, Spanish, Italian and Greek. For each letter (in each language) there is a short interactive animation clip.</p> <p><i>The Amusement Park</i> with 12 games for developing number concepts, colour, pattern, shape, musical abilities (Latin American rhythms for ladybirds) and orientation.</p> <p><i>Choir singing Frere Jacques</i> in a round the educational aims include:</p> <ul style="list-style-type: none"> • Basic music composition knowledge and creativity • Maths concepts: matching patterns and basic geometrical shapes, addition of numbers to 20, matching sums to 20. • Learning the sounds and shapes of letters of the alphabet (the graphemes and phonemes) 	<p>All the games are aesthetically pleasing and fun, with contents appealing to children's interests. Creativity is modelled and offered in several games: ladybird making Latin and American music for example.</p> <p>In the programme with nursery songs interactive animation games accompany each rhyme. The consistent feature in all music is the use of percussion instruments. Most songs are performed at an accessible speed to young children, although some of the songs are sung too fast for 3 and 4 year olds to join in. Some songs offer practice in music dynamics (soft and loud) and others offer creative opportunities of movement to music (Sur le Pont d'Avignon).</p> <p>In some games there is some discrepancy between the levels in calculations (abstract adding sums to 20 appropriate for children aged 5-7years) and basic ICT levels of mouse control, appropriate for children aged 3-5 years. It is not certain which age group this game aims for.</p>
TuxPaint (da) and gCompris have been translated into French.	http://gcompris.net/	http://tuxpaint.org/	


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Title	Web Site	Description	Evaluation
Germany (Deutsch)			
Internet-abc	http://www.internet-abc.de/kinder	Training children to safely use the internet, to use social networks safely, to access the internet to enhance homework to make use of democracy to open discussions and offer ideas, ask questions and expect an answer. There is also a creative programme too in the Flizzy chapter.	The educational aims also include:
Prices from 15 to 30 Euros.		Four animals host four sites, respectively:	<i>Independence and choice:</i>
		<i>Eddie</i> (the penguin) - Computers and Internet: 'search engines, viruses, server security, comfort, surfing the internet safely'.	One of the programmes, Flizzy's Fun and Play, offers players 3 choices; to answer questions (sent before and on invitation to the programmers), to visit commercial games list and a creative art programme- make your own picture.
		<i>Percy</i> (ant eater) – <i>Schule & Hobby</i> = <i>School & Hobby</i> use the internet to help with homework (access to libraries, tutorials)	<i>Creativity</i>
		<i>Flizzy</i> (the squirrel) - <i>Spiel & Spass</i> = <i>Fun & Games</i> : crafts, play, learn to surf and a large selection of recommended computer games ranging from dance and movement to music making, drawing, strategy and logic games.	The player has a choice in selecting the habitat, characters and objects/creatures, background and colours.
		<i>Jumpy</i> (the rabbit) - <i>Mitreden & Mitmachen</i> = <i>Join the conversation Participate</i>	<i>Adult participation:</i> Percy's site "Schule & Hobby" (enhanced home work) is specifically designed to engage parental support in children's homework.
		Invites users to send in questions: 'What do you think about current issues affecting the Internet' and more....	Vast resources such as extended reading material, libraries and tutorial help are on offer here.



All four programmes necessitate developed computer skills, reading and comprehension skills, level of language comprehension: the UK these will be equivalent to achievements of children in upper Key Stage One (7 years.).

There is some discord between the 4 host animals which seem to appeal to younger children and the levels of skills and knowledge mentioned

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Title	Web Site	Description	Evaluation
<p>Oscar the Balloonist Town Animals From Tivola www.tivola.de Costs: €9.99</p>		<p>Oscar is the host character, and is about to travel across the world to learn about animals. The series offers 4 settings:</p> <ul style="list-style-type: none"> • the town animals • the African savannah animals • underwater life • adventures of the meadow <p>The explorations are personalised: the player selects an animal to be his symbol and writes his name.</p> <p>The player will choose what he wants to learn about, which town animal he wants to start his study with. He can choose from: cats, birds, swan, rats, squirrels and rabbits.</p> <p>Oscar has a book of improbabilities. In each exploration, Oscar (and the player) tests these and finds out the facts about each animal.</p> <p>Each animal is in his habitat – an interactive animated sequence, in which the player can choose what to learn about by pointing the cursor.</p> <p>At bottom of screen there is a range of icons, explained by Oscar verbally: a digital camera player can use to save pictures from each animal site onto his travel book, a seasons' globe, loudspeakers and a game.</p> <p>The graphics are explicit with figurative drawings representing near life resemblances.</p>	<p>The language used for instructions is accessible to children with language and comprehension at level 3 in UK National Curriculum and Assessment scales: Key Stage One (5-7 years). However, there is a discrepancy between the level of attention and language needed to access this learning and the portrayal of the host character and the design of the site.</p> <p>The following educational aims may be met:</p> <ul style="list-style-type: none"> • listening, concentration and attention: the cursor does not respond if the player tries to point at another image on the same screen while somebody talks. Player has to listen to the end of the speech. • perseverance (positive attitude to learning) • investigation • memory • animal habitats, features and life styles: reproduction needs, diet, sleeping habits and other needs. • the seasons and how animals adapt to each season to survive. • literacy: writing own name selecting letters of the alphabet from alphabet line. • Learning English: the programme offers choice of listening in English or German at every stage. <p>There is no significant opportunity for the player to be creative. Adult participation is not necessary but will be an advantage. There is no room for mistakes: the player has to start again from the beginning. Intense concentration and memory is required to memorise and learn all the facts in order to answer</p>

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Title	Web Site	Description	Evaluation
Aquasoft: Multimediawerkstatt 2 http://www.aquasoft.de/		This is multifunctional software provided to create movies, to record, to write, to paint and crate puzzles of own pictures. It is conceived for school children but can be used in kindergarten with support.	questions correctly. This software encourages creativity and it provides a strong context for collaboration. Instruction from the teachers may not be necessary *
SL: Fragenbar – Vorschule http://www.fragenbaer.de/		Educational software for basic mathematical skills up to 10. There are 10 different mini games easy to handle. There is a frog 'Bandit' who has little ghosts trapped in bottles. Logic and concentration are equally challenged and supported as the correct solution strategies.	Development of mathematical skills and concentration. Children can support each other while playing – develops social skills Each step is comprehensible and transparent for children The motivation is enhanced by witty sayings, dialogues and praise, and of course fueled by the desire to rid the ghosts. The right mix of fun and learning for preschool children. The games are short and can be interrupted *

€39 – one version €299 for whole school including support


FB-CD Screens/FB ScreensVor.html
 €14.99 Download version

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Title	Web Site	Description	Evaluation
Spassbildermaschine http://www.chip.de/downloads/		no text, verbal instructions only	
Daumenkinos! – trickfilm Druckmaschine http://daumenkinos-trickfilm-druckmaschine.softonic.de/		<p>This is a very small program: flipbooks! – An application to create a flip book of any video file. So it is an animated film printing machine and it does the job without problems.</p> <p>The children can print the single pictures of a video and fit together to a flip book.</p> <p>This free software cuts the frames of a video and printed the whole "flip" finish on paper.</p>	<p>Do you remember the having fun making and playing with cartoon flip books? Maybe it was just the corner of a school exercise book. It's the easiest way to create a short films on paper. Even in the digital age, this form of moving pictures is still charming.</p> <p>Children gain skills in picture editing (every video consists of many pictures) The application can/ should be combined with making a video</p>
Spassbildermaschine http://download.chip.eu/en/Spassbilder-Maschine-1.5.6_112014.html		<p>Spassbilder-Maschine is a free photo editing program used to create funny caricatures from portrait photos.</p> <p>It simply deforms pictures, its an easy to handle, small application; providing short lived fun.</p> <p>Children learn to upload pictures and get the impression of facial expressions</p>	<p>Encourages social skills: children can laugh together and deform pictures of each other.</p> <p>The tool should be combined with taking pictures, encouraging creativity</p>



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Title	Web Site	Description	Evaluation
Other freeware: TuxPaint and gCompris have been translated into German.		http://tuxpaint.org/	http://gcompris.net/
Microsoft: Schlaumäuse – Kinder entdecken Sprache www.schlaumaeuse.de (Registration is necessary)		Education software at various levels of difficulty with mini games through which children learn basic skills necessary for successful reading acquisition. There is a feature for the teacher, where they can test the language level of the child and plan support accordingly.	Educational aims: <ul style="list-style-type: none"> • Developing language • Encouragement of literacy skills • Promotion of children with migration background • Encouragement of social skills: children can help each other Adult support is not necessary. *
India (Standard Hindi) Mulakshar (Matrubhasha) http://www.matrubhasha.com/productshindi.html Each priced: \$7.99		The software provides for encouragement of literacy and can produce indirect learning where children can identify the sounds, put them together and produce simple words which would normally not be represented in the more traditional methods of learning the alphabets. Mulakshar also offers the child a way to experience creative play using some playful game techniques. There are various memory and puzzle based alphabet games which can help to reinforce learning and development in literacy. This is further complemented through worksheets, activities and lesson plans (provided for the teachers).	Mulakshar software is an easy to use and child friendly program. It gives the child the ability to start learning the alphabets and become familiar with them very quickly. It comes with a wide range of options and activities where the child can get involved almost instantly. It offers the child complete control where he/she is fully responsible for the choices they make whilst playing a game. Active control by the child provides for learning by doing and encourages early awareness and positive disposition in areas of literacy and communication.
			
Rang , (Matrubhasha) http://www.matrubhasha.com/productshindi.html		The Rang software allows for children to experiment with learning the colours in a way that is far more advanced for young learners in	The Toddler and Level 1 CD's are easy to use and offer interactive software which enables and encourages the child to learn colours in Hindi and

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Title	Web Site	Description	Evaluation
Each priced: \$7.99		<p>a school environment. When learning the Hindi colours, children are given primary knowledge of colours through various forms of interactive games. Learning is made interactive and colours games encourage young children count alongside the narrator.</p> <p>The use of colours in clothing is highly pronounced in India and in particular with mythological characters. Some games highlight these characters and prompt children to name the colour of a garment. For example, the colour of <i>Sita's Sari</i>.</p>	<p>observe Indian related objects of the same colour. This CD's also highlights the use of various colours in Indian Dress which makes it:</p> <p>“Culturally Informative (in terms of music, stories and mythology).</p> <p>There are various colour based games which can help to reinforce learning and development of colours. This is further complemented in each of these titles through worksheets, activities and lesson plans (provided for the teachers).</p>
<p>Sankhya (Matrubhasha)</p> <p>http://www.matrubhasha.com/productshindi.html</p> <p>Priced: \$7.99</p>		<p>Here the learning of numbers is conducted in a musical manner through song s and background music. When counting objects, in this instance, <i>lotuses</i> (which is also a traditional flower for India), children are encouraged to sing the numbers aloud as demonstrated by the narrator.</p>	<p>The software provides for encouragement of numeracy and can produce indirect learning where children can identify numbers through songs which would normally not be represented in the more traditional methods of learning. Sankhya also offers the child a way to experience creative play using some playful game techniques. There are various number based games which can help to reinforce learning and development in numeracy.</p>



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Aakritiyon (Matrubhasha) http://www.matrubhasha.com/productshindi.html Priced: \$7.99		The software provides for encouragement of shapes and can produce indirect learning where children can identify shapes through computer mediated games which would normally not be represented in the more traditional methods of learning. There are various shape based games which can also help to reinforce learning and development of colours and numbers. This is further complemented through worksheets, activities and lesson plans (provided for the teachers).	Aakritiyon provides for both an educational and challenging purpose for the learner. It is fun and enjoyable for young learners who can learn the names of shapes in Hindi flexibly; moving backwards and forwards throughout the lesson at their own pace. This allows for learning by doing and encourages the user to determine his/her own course of action. Active control by the child provides for learning by doing and encourages early awareness and positive disposition in areas of shapes development.



Freeware: TuxPaint has been translated into Hindi (hi)

<http://gcompris.net/>
<http://www.digitaldialects.com>
<http://www.rajshri.com>

<http://tuxpaint.org/>
<http://www.cheenifortots.com>
<http://www.matrubhasha.com/kids.html>

Israel (Hebrew)


Maya's Secret
www.sodmaya.co.il

Maya's secret shows the bedroom of a 2-5 year old child with:



- Abacus (number work)
- Drum (music practice)
- Biblical stories with corresponding games: Noah's ark, The Creation of the World, The fruit of Knowledge, Babel's Tower
- Creative: making own paintings
- Gallery for own paintings

The drum game offers practice in learning Hebrew nursery songs. The words are repeated as the carriages of the train are loaded onto the tracks. Player can select one carriage at a time. Excellent resource for teaching the verses –lyrics of songs. The Alphabet in 6 languages: each letter in each language carries a story - interactive animation. There are opportunities for learning about the object / creature depicted for each initial letter. Handwriting in Hebrew: interactive animated to



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Title	Web Site	Description	Evaluation
	<p>Price: In kindergarten 300 Shekel per class per year</p> <p>TuxPaint has been translated into Hebrew (he)</p>	<ul style="list-style-type: none"> • Making films – creating own film • Memory and matching in finding the pair card game • Amusement Park (rockets – number games) • Alphabet letters: the Hebrew Alphabet consists of symbols which represent not only a sound but also a word. • <p>The educational aims include:</p> <ul style="list-style-type: none"> • more and less concept • Counting objects to 10: • Ordering numbers to 10 • Basic subtraction and addition to 10 games • Shape recognition and matching shape • counting in twos (in Noah's Ark) <p>http://gcompris.net/</p>	<p>practice Hebrew writing on letter's island – writing in the sand. Handwriting lesson for letter Alef. Player can select a drawing tool to practice. Reading: reading by 'sight' – whole word recognition - matching book titles to the front cover pictures. Listening, thinking and text comprehension.</p> <p>Creative opportunities: the painting game, handwriting game, learning songs, tunes and lyrics. Learning Bible stories: history and religion related to Israel and the world</p> <p>Parents' participation: a special entry for parents is incorporated in each game in which parents can mark their child's successes. Parent participation in learning is encouraged: some games need adult input.</p> <p>http://tuxpaint.org/</p>
<p>Italy (Italiano) <i>100 giochi</i></p>		<p>The educational aims include:</p> <ul style="list-style-type: none"> • Memory stimulation through reposition and reconstruction of shapes • Develop knowledge of basic colours exercises with the indication of colours required; • Acquire the logical concepts through a series of exercises on the difference in big and small, open and closed, long and short, high and low; • Acquire the topological concepts through 	<p>The program can be used by children of the first cycle (grade 1 = Year 2 of Key Stage 1 in the UK) in a path of logical-mathematical activities, including school children from infant schools as the navigation is intuitive in it and driven by verbal messages.</p> <p>The software supports basic skills, Italian logic and problem solving, mathematics</p>

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Title	Web Site	Description	Evaluation
		<p>answering questions outside or inside, above or below, near or far, forward or backward;</p> <ul style="list-style-type: none"> • Recognise graphemes and phonemes through the association of the word image and vice versa; • Recognize the figures related to quantity • Recognize basic geometric shapes through the re-composition of schematic images 	
<p>DISTRETTO SCOLASTICO 54 GROTtagLIE (TA) Via Don Minzoni 1 74023 GROTtagLIE (TA) E- mail: info@helpicare.com Price: unknown **</p>			
<p>Gioca con Teddy (Playing with Teddy)</p> 		<p>This is a programme designed to stimulate logical skills and thinking, such as visual perception, space organisation. These are pre-requisite skills necessary for reading and writing and other more complex logical activities.</p> <p><u>HELPI CARE by DIDACARE SRL</u> Via Galvani 5A 40017 S. GIOVANNI IN PERSICETO (BO) ITALIA</p>	<p>The games offer exercises to position objects in particular environments, to recognise shape and solve puzzles, discriminate colours, matching shapes to silhouettes.</p> <p>At the end there is a game of dominos. The programme is conceived as a closed system which allows only the use of programmed exercises.</p> <p>E-mail: info@helpicare.com</p>
<p>Ariva la scuola (School is arriving)</p>		<p>The main aim of the programme is to encourage reading skills, mathematics and to</p>	<p>Activities are divided by levels and provided with</p>

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Title	Web Site	Description	Evaluation
KNOWLEDGE ADVENTURE INC.	 <p>19840 Pioneer Ave. 90503 TORRANCE CA - USA schoolsales@knowledgeadventure.com **</p>	<p>improve the child's creativity through a variety of activities that she/he can perform inside a virtual classroom. The teacher is the Jumping Hare (Saltralepre).</p> <p>Activities include:</p> <ul style="list-style-type: none"> • Visual and auditive discrimination • Time and space • Text comprehension • Recognising alphabet letters • Recognising numbers, shapes, colours • Object classification • Diagrams • Listening to sounds and songs • Reading the analogue and digital clock. 	<p>scoring boards for the child to evaluate his learning. This can be printed out and saved in folders for each child, so that teachers can monitor the progress of the group.</p> <p>A drawing and colouring book allows the child to create his own pictures and use colours.</p>
A scuola con Adibu (At School with Adibu) www.sd2.itd.cnr.it	 <p>COKTEL/SIERRA 25 Rue J. Braconnier 92366 MEUDON-LA-FORET CEDEX FRANCIA E-mail: webmaster@sierra.fr</p>	<p>The programme has as objective to get the child acquainted with the natural world in a playful fashion. It presents animals in their habitat, the seasons and the temperature of the air, day and night, light and dark (shadow), atmospheric phenomena. The child learns that animals belong to certain categories according to their structure, somatic features and eating habits; he learns about climatic characteristics, about the fauna of specific geographic environments.</p>	<p>Several games are designed, in addition to consolidating the knowledge gained to develop the capacity for spatial orientation, sharpen observation skills and stimulate logic skills.</p> <p>The program provides three levels of difficulty and is supported by songs and video clips. can be used for simple paths of natural science and logic for both pre-schoolers and first-graders.</p>

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Title	Web Site	Description	Evaluation
TuxPaint (it) and gCompris have been translated into Italian.		http://gcompris.net/	http://tuxpaint.org/

Netherlands (Dutch)

Bereslim Boeken

(Bereslim Books) www.bereslim.nl
 Costs: Bereslim basic package €495 for use of bereslim Books and Playing with Letters (see below) for up to 1000 times. Package €995 for use up to 4000 times. Package €1495 for use of up to 7000 times.



Special rate for IBM KidSmart programme: For 100-200 Young Explorer units: €350 per computer per year. For 200-300 Young Explorer units: €300 per computer per year For 300-500 Young Explorer units: €200 per computer per year.

Sample of 3 of 12 animated stories doubled up with comprehension practice exercises:

Ballotje en het Paard = Ballotje and the Horse

Ballotje rides out of the farmyard on the family horse and after a journey full of novelty feels lost but is found again by her family. The story encapsulates a young child's craving for independence and her dependence adults.

De Beer in de speeltuin – The Bear in the Playground: the bear bullies the children at the beginning, to be included in the end.

Kleine Muis zoekt een Huis – Little Mouse looks for a house


Little Mouse cannot fit his large apple in his small house and he asks his neighbours (rabbit, mole, badger, bear) to accommodate him but all refuse.

Each story is accompanied by comprehension practice exercises introduced by 2 children host characters, one older and one younger (3-7years). They speak to the screen, asking the viewer to recall the sequence and check understanding of story. Answers are selected from multiple choice (of 3) images.

The stories place a high value on family relationships and identification of feelings. The family offers warmth, trust, forgiveness, inclusion. The *Bear in the Playground* story relates to the causes of bullying in an early age: being new to a group, not being included and being different. Feelings of loneliness and rejection transform into positive attitudes and perseverance. The mouse in *Little Mouse* story transforms from having low self-esteem to becoming confident. The stories have an accessible sequential structure and repetitive language supporting; vocabulary, language comprehension, sequencing, and knowledge.


Creativity in thinking and problem solving is offered through both stories and comprehension exercises. Adult participation enhances comprehension and encourages shared thinking with opportunities for philosophical discussions (philosophy for children). The graphics of the animated stories are highly effective. Children have instant access to story lines: the animation drawings are of 2Dimensional in naïve with colours that are subtle, non-intrusive. Narrator's voice is steady, calm and reassuring. No stereotyping or violence. Positive gender image: girl is adventurous and brave.

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Title	Web Site	Description	Evaluation
Sameslim www.bereslim.nl Playing with Letters		<p>Reading own name, recognising letters and groups of letters, hearing initial letter sound and letter sounds in words. The two children Sim and Sommer are the host characters, playing in an early years set: art workshop, dressing up.</p> <p>Sim, the little boy, still carries his teddy. All the games are first introduced as sketches in which Sommer is the 'teacher'/ leader and Sim the younger child, 'performing' shows in front of their friends thus introducing the 'reading' games. The Teddy Bear helps the player if player cannot achieve by herself.</p> <p>Level 1: 6 games to practice recognition of own name; <i>it shows that the producers have engaged experts in emergent writing for early years, to use children's own very first attempts to use mark making as 'writing'.</i></p> <p>Level 2: to hear and recognise the initial letter sound of player's name.</p> <p>Level 3: to hear and recognise the initial letters of player's name in the middle of words.</p>	<p>The player is invited to register his name as he/she logs in. This activity requires adult support. The games progress in order of difficulty. The player needs to complete one serie to progress to the next level. Each level has 6 trials of the same game, with slight variations. The player has the opportunity to practice 6 times the same skill, before moving on.</p> <p>This set of games are both playful and challenging, encouraging and praising perseverance in a child who is learning, offering plenty of opportunity for practice and rehearsal of same concept before progressing to next level.</p> <p>Creativity is promoted by example: scenarios replicate the creative activities in pre-school: painting, dressing up, doing magic tricks. Adult support is necessary to sign up to the games. Once introduced by adult, games are accessible to children but adult support can be an advantage. No stereo-typing: the girl continues to be the leader, the younger boy, still holds his teddy. No violence; some competition is suggested in a humorous way.</p>
Bereslim Play		<p>Two children, a girl and a younger boy with a Teddy Bear, play hide and seek or charades. Interactively, the player and the younger boy have to find the hidden child (always the girl who leads the game) or guess the mimed activity. The Teddy Bear helps if they get stuck. All the games represent familiar environments (home, farmyards and play parks) and daily routines, such as brushing teeth or getting dressed.</p>	<p>Educationally the games contribute to:</p> <ul style="list-style-type: none"> • Developing vocabulary around home, play, children's sports, family • Making friends and helping each other, resolving conflicts among friends • Developing spatial awareness through playing the real game of hide-and-seek • Developing playfulness and creativity in

Price: see previous


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Title	Web Site	Description	Evaluation
<p>TuxPaint (nl) and GCompris have been translated into Dutch</p> <p>Norway (Norwegian)</p> <p><i>Reven og grisungen</i> www.minimedia.no Product produced by Kari Hovda</p> <p>Cost per unit: NOK 199</p> 		<p>Since all the software games replicate real universal children's games, they can engage the child in enacting the real life game and replaying it on the computer screen.</p> <p>http://gcompris.net/</p> <p>The host characters, a piglet and a fox, sit in their kitchen at the table with cups of coffee, toys and objects scattered around the room.</p> <p>Each object offers a set of games:</p> <p>The picture hanging on the wall offers a few games: making insect soup, cutting the tails of 4 imaginary birds (by the fox), the ladder leaning to the wall offers a game of Snakes and Ladders with dice, the TV offers film making with real film product at the end of the player's input, the book offers box making instructions: this in particular is aiming to get the child to make boxes with adult support.</p> <p>Main learning and development achieved are creativity and mouse practice. The player</p>	<p>play.</p> <p>The creativity in these games stems from the actual playfulness of the games. Adult support is not needed but it would be an advantage, although the Teddy Bear character acts as a more able peer.</p> <p>http://tuxpaint.org/</p> <p>This is a highly creative programme. The imagery and music are entirely original and engaging. The style of drawings for the animation are special and attractive to children: they imitate child's drawing, imperfect, fantastical, funny.</p> <p>Other educational aims are developing:</p> <ul style="list-style-type: none"> • observation skills and investigation • logical thinking • collaboration • practical activities away from the computer: making the boxes, going outdoors to play • basic elements for a story and story building • story sequencing • listening (all instructions are verbal) • playfulness and enjoyment at work. • counting (scores) and reading numbers to 10, • Concepts of shape



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Title	Web Site	Description	Evaluation
<p>Knerten spillet www.minimedia.no Cost per unit: NOK 199</p> 		<p>develops fast reactions and precise cursor control to obtain results.</p> <p>The host characters are a boy, a girl, their father and grandfather, in the setting of a typical Norwegian house in the countryside of Norway: a timber house within woodland, the woodland community with shop and a few neighbours.</p> <p>The player uses the cursor to choose what he wants to explore:</p> <p><i>Main door:</i> choice of 5 art and craft activities with practical applications.</p> <p><i>Upper window:</i> skipping rope and counting</p> <p><i>Lower window:</i> cursor control to clean the house of ants with the vacuum cleaner</p> <p><i>The woods:</i> looking for creepy-crawlies with torch (cursor) Number patterns and Solitaire game with natural objects (conkers, leaves, pine cones, stones).</p> <p>The games are accessible to children as long as they understand the language: these are simple instructions. Games appropriate for children aged 4years. (Minimedia recommendation).</p>	<p>The main feature of this product is that it offers the players practical materials to play with and create with away from the computer. Within the 'main door' are there several activities of this kind: a paper puppet theatre kit and set of puppets (with the host characters), the children's clothes, the houses, envelope making set, money and bus tickets to play pretend games, a colouring book with the host characters.</p> <p>Another main feature is the natural world portrayed by the front page of the programme and within the games: one of the choices for the player is to explore the undergrowth of the woods with a torch – the cursor becomes the torchlight.</p> <p>A constant feature is the music which accompanies each game.</p> <p>The product offers learning and development in:</p> <p><i>Language (comprehension) – all instructions are in Norwegian</i> <i>Listening skills and attention</i> <i>Creativity – make own pictures and choose colours to colour in</i> <i>Exploration and investigation the natural world</i> <i>Recitation of number line to 20 and beyond (during skipping, the children count)</i> <i>Logic: Solitaire game with stones</i></p>


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Title	Web Site	Description	Evaluation
Ungenei Gata www.minimedia.no		<p>The setting of this programme is a Norwegian village. The hosts are 3 children, aged 2-5, a non-walking baby and a dog.</p> <p>From the front page bird's eye of the village, the player can choose the place he wants to visit, and each place offers different activities. The picnic table: a quiz game with scores. The tree house: a word book in which player can type any text.</p> <p>The sandpit: Solitaire game with marbles The football pitch: directional cursor control.</p>	<p><i>Knowing the local environment</i></p> <p>Cursor control</p> <p>Using the keyboard to write: practice knowledge of letters and emergent writing, practice typing. Listening developing speech (vocabulary)</p> <p>Memory game with matching pairs of wild flowers Developing logic: the Solitaire game</p> <p>The learning objectives are very relaxed here. It is mostly a play site for children.</p>
<p>TuxPaint has been translated into Norweian Bokmal (nb) and Norwegian Nynorsk (nn) GCompris has been translated into Nynorsk.</p>	<p>Romania (Romanian)</p>	<p>http://gcompris.net/</p> <p>Educationally, the programmes offer children opportunities to learn about the natural environment, changes to the flora and fauna that occur in spring and autumn, the temperature of the air, the life of animals, the length of the day/ night. Both programmes promote language development. The level of comprehension</p>	<p>http://tuxpaint.org/</p> <p>Programmes promote mathematical concepts such as shape recognition and main features, simple calculations and counting, learning about pairs. Independent access – transparency of control Creativity: in each programme there is a creative game – painting- which has the functions of a colouring book. The player can select colours to create a picture already designed for him (her) and</p>


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Title	Web Site	Description	Evaluation
	<p>Natura se trezeste la viata – Nature Reborn</p>	<p>needed to follow instructions is high; however, parent involvement is not only encouraged and mentioned as part of the licence agreement/ initial instructions for the programme.</p> <p>In Arrival of Autumn the host character is a Good Fairy who invites the player to explore the changes in the environment that take place with the coming of autumn. The various games are concerned with changes of leaves, light and dark, the life of animals.</p>	<p>thus can demonstrate and practise his knowledge about colours related to spring and autumn. This process can be satisfying for the child but slightly limiting. Since the language comprehension competency required to follow instructions is high,</p>
	<p>United Kingdom (English) Alphablocks</p>	<p>In Nature Reborn the host character is an Elf who invites the player to explore various games related to phenomena of spring, from new growth of plants to baby chicks, lambs, calves and so on, the young on a farm in Romania.</p> <p>The programmes respond quickly to player's commands, through computer mouse control.</p> <p>These programmes as useful educationally, attractive and interactive appropriate for the upper range if the 'early years' age group: 4-6 years.</p>	<p>The quality of design and sound is high and attractive. The language used is clearly spoken and correctly used, with some colloquialisms to engage with young children and young parents, but mostly based on the literary Romanian. The actors' voices are believable and engaging.</p> <p>Both programmes have healthy and positive ethics especially in the context of appreciation of the natural environment, positive and respectful attitudes to life. Competition against oneself is encouraged by being presented with opportunities to overcome challenge.</p> <p>There is here a discrepancy between the level of language and the level of independence and creativity offered.</p>
<p>Alphablocks</p>		<p>The host characters are letters of the alphabet, each with own personality. The interactive animations offer practice in using letters to form words – a young child's scrabble in the form of the game 'Hangman'.</p>	<p>The educational aims include: practice of synthetic phonics, using groups of letters to form and read words:</p> <ul style="list-style-type: none"> • hearing sounds of letters (phonemes), recognising and 'reading' letters of the alphabet


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	 http://www.bbc.co.uk/cbeebies/alphablocks/#/lb/alphablocks/alphablocksgames	<p>A narrator (male voice) gives instructions in simple clear voice. The player can move the animated letters on the screen by using the cursor and drag –drop actions to form words. Each initial letter then enacts the word that has been formed.</p> <p>The teaching/learning process in this programme is based on the Literacy Hour (UK National Curriculum for Reception and Key Stage One Dfes, 1999), the synthetic phonic approach (Rose, 2002) and the Letters and Sounds Phases 2-6, Dcsf, 2010 – for children aged 4, 5 and 6 years.</p>	<p>(graphemes)</p> <ul style="list-style-type: none"> • using phonic knowledge to form words (hear sounds of letters and their order in a word) • knowing the meaning of these words – develop comprehension <p>To meet objectives stated above, the site is effective: the player can make mistakes and receives much verbal and visual help (additional instructions). The programme offers examples to the player by saying words that sound like X. This employs child's knowledge and ability to rhyme. There is repeated practice in using one initial letter at a time with changeable suffixes to make different words.</p> <p>Animations are interactive and responsive, and the graphics are funny and attractive</p>
<p>The Land of Me</p> <p>http://www.madeinme.com</p>		<p>The Land of Me brings children through a series of adventures involving the three main characters: Eric, Willow and Buddy a racoon , a bird, and a large bear. Children built a bond with the characters and are eagerly looking forward each time they go to another part of Land of Me where they learn about:</p> <p><i>Shape, size and colour</i> <i>The World Outside – about weather, geographical features and places on Earth, day and night</i> <i>Making Things: design and make</i> <i>Rhythm and dance</i> <i>Songs and Rhymes</i></p>	<p>Adult involvement and participation is nurtured and encouraged: each page has text aimed at adults.with extra information about the places and animals encountered and facts.</p> <p>Distinguish colour and learn names of colours Develop imagination: children can create a creature, select size and colour as well as if this will be a land, sea or air creature. Begin to have a concept of comparative size and compare sizes: large, medium and small counting objects to 3 Learn about the weather in varied places on earth from lake side to deserts and the arctic Learn about night , day, night and evening Identify and create rhyme</p>

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Title	Web Site	Description	Evaluation
 <p>http://www.wired.com/geekdad/2010/08/review-developmental-value-in-the-land-of-me/</p> <p>http://www.youtube.com/watch?v=kW0GEpffts8</p> <p>http://cherishedbyme.com/2011/04/the-land-of-me-a-review/</p> <p>Noisy Things from Q&D Multimedia at www.q-and-d.co.uk</p>		<p><i>Story Time.</i></p> <p>Each site is hosted by a different character/ creature: a snow monkey, a vulture, a bear and so on. Each game set is also accompanied a by practical hands-on activities related to the game: cutting and sticking, making and wearing masks, etc.</p> <p>http://www.beingamummy.co.uk/2010/07/freebie-and-review-land-of-me.html</p> <p>This is an audio – visual tool for design and music composition linked to number patterns.</p> <p>The product contains 6 screens with abstract figures, stylised monsters, balloons and faces in various positions and combinations of all the above.</p>	<p>Develop a sense of rhythm and beat Enjoy movement – join in the dance Design and make – inspiration for practical art and craft activities Listen and concentrate to listen to stories, develop and understanding of story line and story structure The programme is appropriate for young children aged 3 and 4 years. Each chapter offers practical hands-on activities to players.</p> <p>This is an entirely creative product: the overarching aim is play, creativity and thinking. Other educational aims:</p> <ul style="list-style-type: none"> • patterns in maths, the basis for calculation skills: multiplications, algebra. • colour discrimination, colour patterns • Musical notions: loud and soft (dynamics), high

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		<p>The player creates a visual pattern by pointing the cursor at various colours and these turn into sounds.</p> <p>Sounds vary in tonality, rhythm and pulse.</p> <p>The teachers' manual explains how these can be used to link to mathematics in sessions.</p> <p>Similar products from Q&D Multimedia, on Patterns (mathematics – number) and music: <i>Beep Beep; Number Run; More Musical Monsters; Riff</i></p>	<p>and low (tonality), pulse, beat., musical phrase, sequence.</p> <ul style="list-style-type: none"> IT skills needed- cursor control <p>Access to all games is instantaneous – IT needed is transparent. No written or verbal instructions needed to obtain effect.</p> <p>Adult input will enhance the experience.</p> <p>No gender stereo-types or violence, the design is entirely abstract and nay figurative representation is of a fantastic nature</p>
<p>Magic desktop 10 free preview sessions from www.magicdesktop.com</p> 		<p>The desktop depicts a wizard's abode with treasure chest, cauldron, magic wand, a globe, a candle and spider webs. It offers 8 programmes and games including:</p> <p><i>Easy Paint</i> programme with drawing tool (brush) choice of 24 colours, writing option with choice of font, size and colour of script, picture rotation and printing out.</p> <p>Memory game and matching pairs (<i>Find a Match</i>) game with score board measuring speed of solution</p> <p><i>My first music</i>: piano keys which play Happy Birthday song ass player touches keys at random, or clicks on play</p>	<p>Of all the programmes on this site <i>Easy Paint</i> is the best developed. It offers the player an empty canvas with opportunities for drawing, use a wide range of colour, rotate the picture, add script to one's picture and print is out.</p> <p><u>Educational aims:</u></p> <ul style="list-style-type: none"> develop creativity some practice in emergent writing: using the keyboard player can write her name, or any word she wants develop memory and match images identify and match facial expressions – in Find a Match game developing confidence in recording own voice

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Title	Web Site	Description	Evaluation
		<i>Talking parrot</i> : recording own voice and playback Game pad with 2 games of journey into space and parking cars –both limiting. Score board measure speed of solution. <i>Magic mail</i> : player can make own email account. <i>Puzzle King</i> with two 4 piece puzzles.	and practising speech • some logical thinking in solving puzzles – limited Adult support is necessary to access Magic Mail and create an email account. This programme also offers information on <u>e-safety, for parents.</u> <u>No particular activities that would inspire the player to play and work away from the computer.</u> Most games have score boards to measure success and speed.
Freeware GCompris has been translated into 17 languages		TuxPaint has been translated, or partially translated, to 85 languages. *Descriptions and evaluations by Prof. Dr. Gudrun Marci-Boehncke and Anita Muller MA	The Land of Me (The first free to download chapter) ** Descriptions and evaluations are translations from the Institute for Didactic Technology www.sd2.itd.cnr.it