TOPIC 5
ICT STIMULATES CHILDREN'S DEVELOPMENT

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A. CREATIVE DEVELOPMENT

- Creativity is essential for successful learning and it can lead to children having the most fun and enjoyment.
- Creativity can be spontaneous.
- It encourages children to explore and discover for themselves, and helps them make links across all areas of learning and development.

The Creative Area Of Learning

- includes arts & crafts
- music
- Dance
- imaginative play & role play.

- It is about giving children opportunities to develop their own ideas and express themselves in many forms.
- ICT resources can enable this development.

1.IMAGINATIVE PLAY

- The video recorder is an invaluable tool.
- It can record all kinds of imaginative play, such as dressing up and puppetry.
- Playing back what was previously recorded gives children an audience and appreciation for their creativity.
- Pictures on the overhead projector can make a backdrop scene for drama, a show or a puppet theatre.

2. MUSIC AND DANCE

- The Minidisc or voice recorder/player is a very flexible learning resource.
- Children can compose and perform their own musical compositions using percussion instruments that they made themselves.
- These compositions can be recorded.
- The Minidisc can also be used to listen quietly to music or children might enjoy moving and dancing to the music.

- **Music and movement software** programmes are also very popular with all ages.
- ICT can also help children to explore sounds and rhythm through the use of musical keyboards, dance mats and software.

3. PAINTING AND DRAWING

- **Overhead projectors** can be used for discovering and creating pattern and shape.
- Objects can be placed and moved around in different positions as children explore colour, shape, form and space.
- An overhead projector can provide a tool to recreate the children's pictures on a larger scale and display for their friends and parents to admire.

- **Scanners** can be used to import pictures into a paint programme for children to use as a backdrop, or to scan objects or collage materials and make patterns.

B. PHYSICAL DEVELOPMENT

- Children are growing rapidly and learn new skills and competencies all the time.
- They develop confidence in themselves and their ability to gain control over their movements and the way they handle tools and equipment.
- Children need to be active and have space to develop these fundamental skills.
- Indoor and outdoor environments are equally important spaces for children to play and learn in, and ICT tools can encompass both.

1. GROSS MOTOR SKILLS

- Children experience tremendous physical challenges in their early years.
- **Digital cameras** are a great way to record their achievements and celebrate them with the children and their families.
- Balancing on a plank,skipping, hopping and other gross movements can be recorded in single frames or, if your camera has the feature, recorded as a sequence over short intervals.
- This fascinates children as they see all the movements they need to make in order just to jump, for example.

2. FINE MOTOR SKILLS

- ICT equipment like digital cameras, recorders, and computers all require some dexterity to use them effectively.
- Learning to use small and large equipment builds children's confidence and gives children a sense of control, autonomy and achievement.
- Using the keyboard, mouse or the buttons, levers and knobs on a piece of equipment such as a digital camera is an excellent way of developing finer motor skills.
- Workers involved in Barnardos' projects observed improved eye/hand co-ordination in children using ICT.

3. KEEPING HEALTHY

- The Internet has a vast range of health-related websites aimed specifically at children.
- These can support children's learning about themselves and their bodies.
- They can find out about diet, exercises and sport.
- Tape recorders, CD players and websites can play music that encourages children to move and dance.

4. DEVELOPING WRITING SKILLS

- Technology adds to the meaningful use of print in the environment and is a model of present communications.
- Word processing packages help children to "write" and print out their story or a letter to a friend.
- Children can construct and send email messages to their friends.
- These activities may contribute significantly to children's emerging literacy.

C. PERSONAL, SOCIAL AND EMOTIONAL DEVELOPMENT

1. BUILDING SELF ESTEEM

- Personal, social and emotional development gives children the best opportunity for success in all areas of learning.
- Children need to develop a positive self-image of themselves in order to flourish.
- Children need experiences that will build their self esteem and self-confidence.

- Creative software programmes allow children to make a polished product which can raise their self esteem and feeling of self-worth.

2. DEVELOPING SOCIAL SKILLS

- ICT tools can be very powerful facilitators of group work.
- Children will be more willing to learn about sharing, turn taking, co-operating and collaborating when they are joining in an activity that they all very much want to be a part of.
- ICT extends the benefits of collaboration beyond the immediate learning environment.

- With the potential of access to the Internet, young children can collaborate with children in other locations, cities, counties and countries.
- Through appropriate use of ICT children can continue to be interested, excited and motivated to learn.
- Children will develop strong interpersonal skills when they have mastered using a piece of equipment and they then help their peers to develop these skills.

3. PROMOTING EQUAL OPPORTUNITY

- ICT can be used to promote equity and to give all children equal opportunity to learn and reach their full potential.
- Many children, because they are economically disadvantaged or because they have an additional need, may not experience equal access to technology.

D. COGNITIVE DEVELOPMENT

1. PROBLEM SOLVING AND MATHEMATICAL DEVELOPMENT

- Children's mathematical development depends on their becoming confident and competent with a wide range of mathematical concepts and ideas.
- Mathematical experiences and processes are part of everyday life and include counting, sorting, matching, sequencing, seeking patterns, making connections, understanding number values, recognising shape and measure and building spatial awareness.

2. PROMOTING LANGUAGE DEVELOPMENT

- At Samoa we are using digital photos to create resources for children.
- The images often focus around a trip or special event that the children have experienced.
- These images are used to create a book with the text recorded in Samoan.
- These books are then used for reading and reflecting on prior experiences while supporting children's language development.


Thank You

ROLE PLAY

- Creating environments such as shops, libraries and doctors' surgeries can engage children in counting, adding,scanning, records, lists, using phones and computers.
- By providing resources that would be found in real environments – calculators, phones, mobile phones, keyboards, tills, remote controls for TV or video, digital scales, cash machines, microwave ovens or washing machines – children will immerse themselves in real-world applications of mathematics.
- There will be opportunities for them to observe numbers and patterns in the environment and daily routines and apply their understanding to their later learning and play activity.


THANKS!