

# Welcome to the Webinar

A joint initiative of The Inclusion Club and the  
International Federation of Adapted Physical Activity

# Where research meets practice – case studies from across the world

Peter Downs and Ken Black



# Agenda for the webinar – what we'll cover

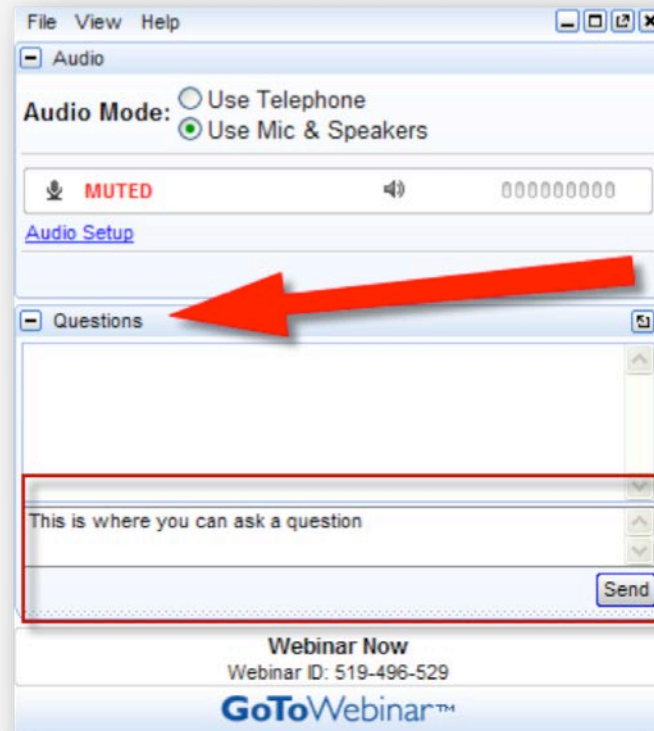
- Introductions and outline of the series
- Welcome from IFAPA President – Marty Block
- Case Study 1 – Peter
- Case Study 2 – Ken
- Case study 3 – Peter
- Case Study 4 – Ken
- Discussion and Close

# Welcome from Dr Marty Block

President of the International Federation of Adapted Physical Activity



# How to ask questions



It's easy to ask questions – simply type in your question or comment and press '**send**'



If your Control Panel disappears then simply press the **orange button** to retrieve

# Case study 1 - Baskin

## Baskin!

We're off to Italy this week. Great country doing great things in the field of sport for people with disability.

Baskin is an inclusive sport, based on Basketball but with it's own identity and structure. The founders of Baskin are Antonio Bodini and Fausti Cappellini from Cremona, northern Italy. It is thanks to their vision and persistence that Baskin came about. People like Antonio and Fausti make a difference in the world - no question.

# Case study 1 - Baskin

In Baskin, it is no longer people that must adapt themselves to an already built sport, but it is the sport that is tailor-made to people. As many experts notice it, it is more effective to include Design for All principles early in the design process than making alterations after solutions are already in the market. That's what Baskin did and that is its real innovation. Instead of developing the usual accessibility strategies to improve "HOW" to offer activities which are already in the sport market, like basketball, focusing on economical, architectural and human factors, Baskin's strategy was to focus previously on improving "WHAT" to offer, by changing the pedagogical architecture of the sport itself. Indeed, redesigning the sport structure in a more ergonomic way towards human diversity, Baskin invented a new way to practice sport, completing the current opportunities of the sport market.

Alexy Valet in "Sport, Innovation and Design for All: the example of Baskin"



# Case study 1 - Baskin

“Universal design is a framework for the design of places, things, information, communication and policy...universal design is human-centered design of everything and everyone in mind”

## Universal Design: Moving the Americans With Disabilities Act From Access to Inclusion

Mary A. Hums, Samuel H. Schmidt,  
Andrew Novak, and Eli A. Wolff

The Americans with Disabilities Act (ADA) has greatly improved the lives of people with disabilities in the United States. Initially thought to primarily require removal of physical barriers, the ADA has consistently been applied broadly to encompass all aspect of entities' programs, services, and operations. As entities endeavored to comply with the ADA, several useful management strategies have emerged, one of which is this concept of Universal Design (UD). Universal Design guides managers in meeting their legal obligations under the ADA and also creating a more fully inclusive environment for employees and customers. "Universal Design is a framework for the design of places, things, information, communication and policy to be usable by the widest range of people operating in the widest range of situations without special or separate design" (IHCD, 2015b). The authors explain the important relationships between ADA's legal mandate and Universal Design as a management strategy.

"Accessibility is a mandate; universal design is a movement" (Knecht, 2015, para. 1).

The civil rights movement of the 20th century produced radical changes in United States culture. New laws were enacted to protect citizens from discrimination based on race, gender, age, and disability. Since its passage 25 years ago, the Americans with Disabilities Act (ADA) has greatly improved the lives of people with disabilities in the United States (ADA National Network, 2015). The purpose of the ADA, as stated in the legislation's preface, is to provide clear and consistent federal standards and enforcement for the "elimination of discrimination against individuals with disabilities" (42 U.S.C. § 12101(b)(1)-(4)).

The ADA provides comprehensive civil rights protections to individuals with disabilities. The breadth of the legislation is represented across the three primary titles governing employment (Title I), public agencies and public transportation



# Case study 1 - Baskin

1. Built environment
2. Information environment
3. Communication environment
4. Policy environment
5. Attitudinal environment

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# Case study 1 - Baskin

## Material adaptation (*Built*)

Two extra basketball rings on the half way line, at a lower height. Different size and weight balls are also used



# Case study 1 - Baskin

## Space adaptation (*Built*)

Protected areas designed to ensure stability and security in the shot in the side baskets



# Case study 1 - Baskin

## **Rule adaptation** (*Policy*)

Each player has a role defined by his or her skill. These roles are numbered from 1 to 5 and have their own rules. Defending is allowed only between players who have the same role, each player has therefore a direct opponent of the same level.

# Case study 1 - Baskin

## Communication adaptation

Use of a mentor, a team player which can accompany players with disability when necessary.





# Case study 2 – Inclusive Design

Design School – University of Loughborough, UK  
Programme leader: George Torrens



# Aims

- university design institutions work with schools supporting young people who have special educational needs
- to provide a design-based solution to challenges young people face when trying to access sport and physical activity
- to work collaboratively to plan and create a new product
- the journey towards a design outcome is as important as the final outcome itself.



# Process

- Design students receive input on principles of inclusive and universal design
- Students team up with a participating school and meet staff and students
- Students assess pupils' needs – issues that may require a design-based solution
- Students and pupils co-produce designs together
  - Designs reviewed with other pupils and staff
  - Final design completed and submitted

# 7 principles of Universal Design

(Christophersen, J; in '*Universal design, 17 ways of teaching and designing*', 2003)

## **Equitable use**

- ensuring that the design is equally useable by a disabled or non-disabled person

## **Flexibility in use**

- useable by a left- or right-handed person – particularly applicable to a disabled user who may have function in one side of the body

## **Simple and intuitive use**

- reducing complexity and emphasising simplicity of use; may be important when considering users who have cognitive, language or movement literacy impairments

# 7 principles of Universal Design

## **Perceptible information**

- providing simple operating instructions in a variety of accessible formats

## **Tolerance for error**

- reducing or removing hazardous materials, which may assist use by people whose risk-awareness may be inhibited

## **Low physical effort**

- enabling use by people who have low exercise tolerance without strain or fatigue

## **Size and space for approach and use**

- ensuring that the design does not disadvantage use from a standing or seated position

# **Inclusive Design competition**

**inclusivity/universality**

**practicality**

**economy**

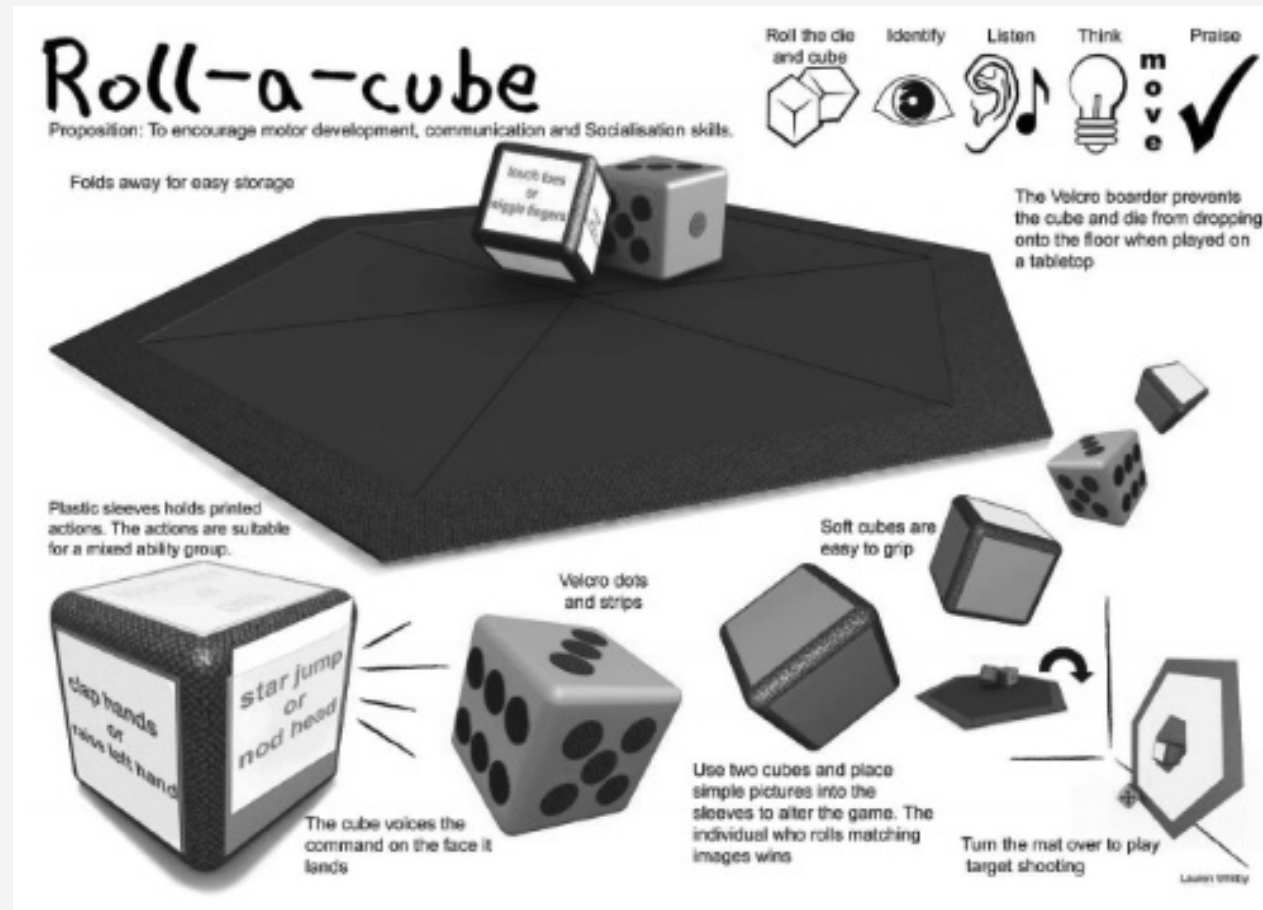
**is it unique?**

**aesthetic**

**does it have commercial application?**

Case Study Participatory Design: G Torrens and K Black in Design for Sport 2009

# Examples



# Examples

## TARGET-TREE

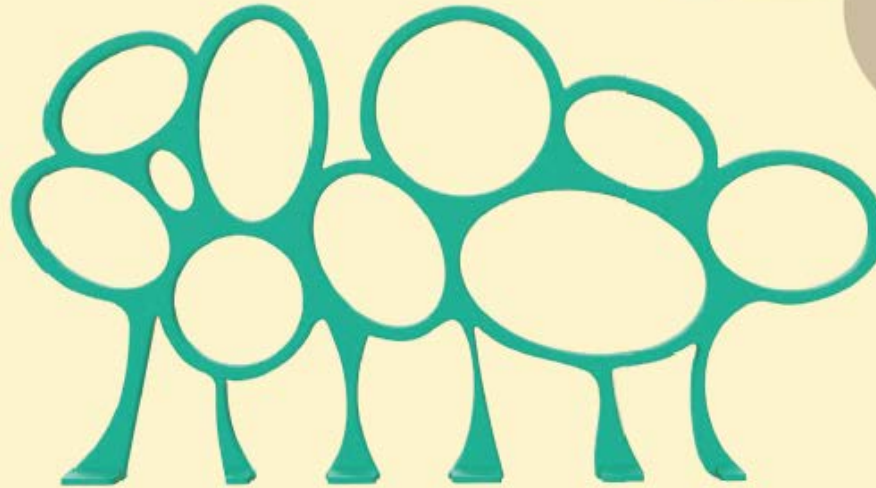
Sensorial exercises to stimulate communicating skills  
- Inclusive for visually impaired people

Gabriela Caldas 2014 Universal Design

Players have to be blindfolded



The ball has a bell inside to help players locate it



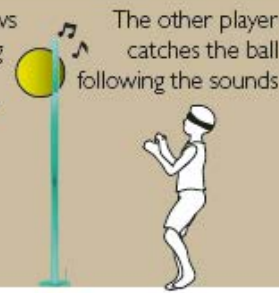
### Manufacturing

- Moulded ABS plastic
- Cut-and-weld metal structure for the ground base
- Vulcanised rubber for the ball with bell inside

The guide gives directions for throwing the ball

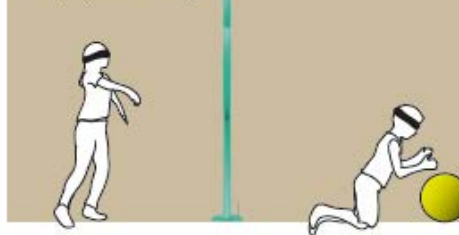


One player throws the ball according to directions

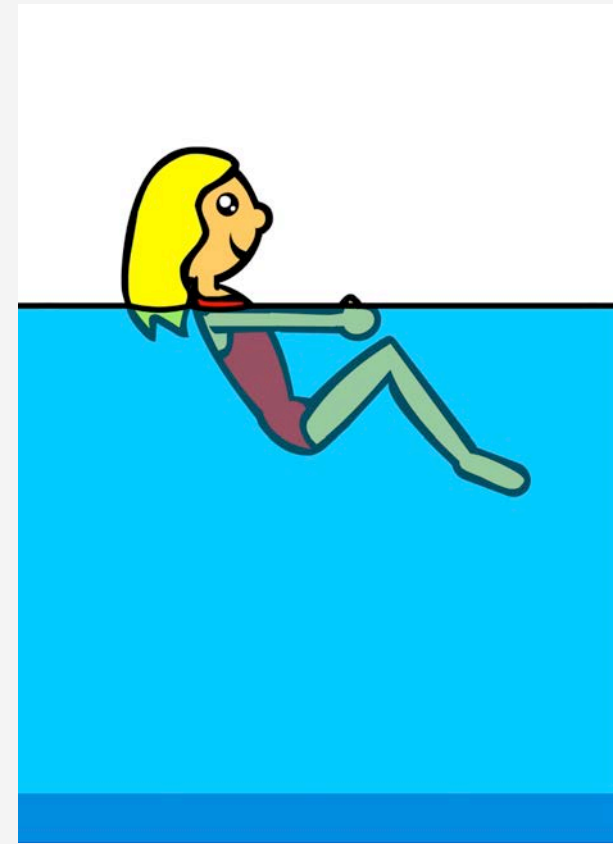
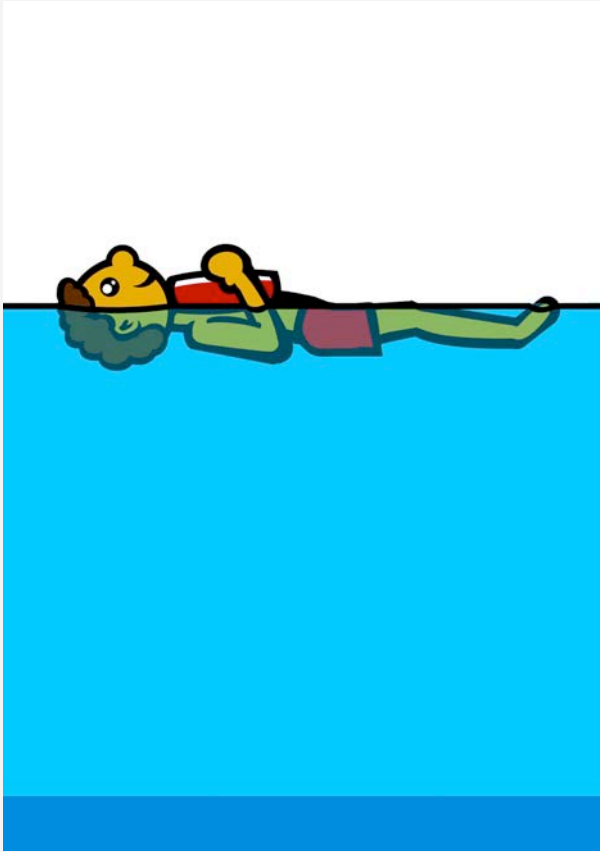


The other player catches the ball following the sounds

When the ball falls, the roles of guide and players change



# Case study 3 – Symbols of inclusion





# Case study 3 – Symbols of inclusion

## **Augmentative and Alternative Communication (ACC)**

“compensate (temporarily or permanently) for the impairment and disability patterns of individuals with disorders of communication”

(Beukelman and Mirenda, 1992)

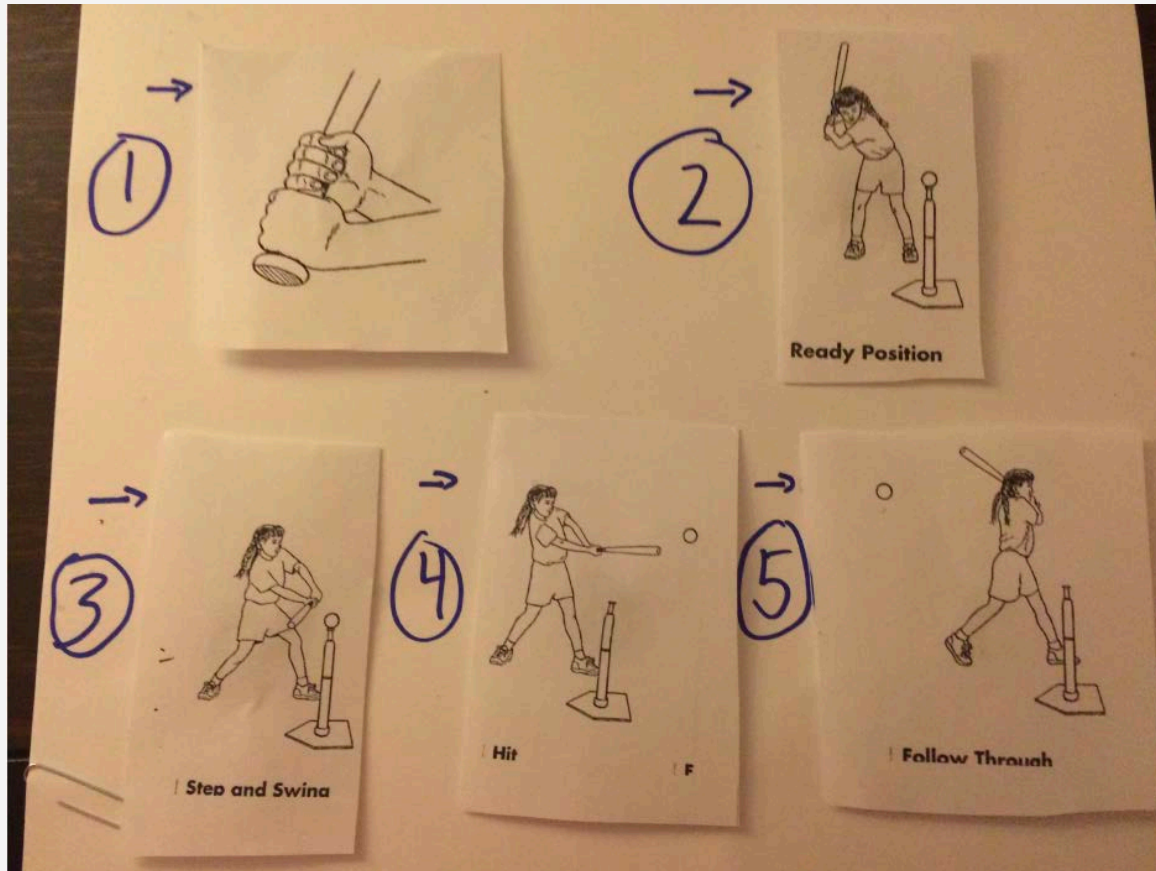
# Case study 3 – Symbols of inclusion

## **Visual schedules**

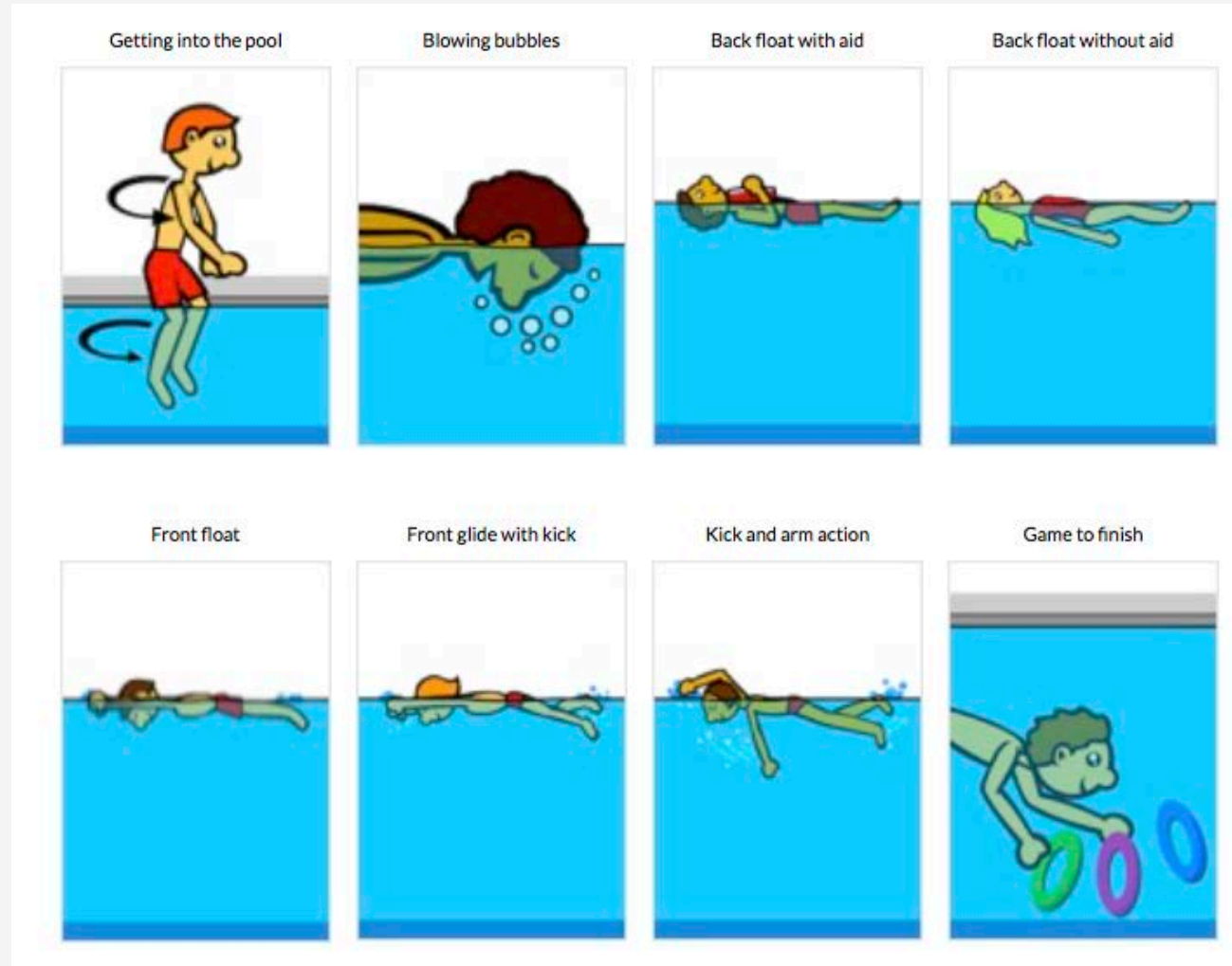
A visual schedule is a series of symbols that depicts related actions in a sequence.

# Case study 3 – Symbols of inclusion

## Task Analysis



# Case study 3 – Symbols of inclusion



# Case study 3 – Symbols of inclusion

## **Social stories**

A pictorial narrative of a related sequence of actions.

# Case study 3 – Symbols of inclusion

## **My Swimming Lesson**

On Saturday morning I go to the pool for a swimming lesson. It's lots of fun. I get into my swimmers before I leave home, and when I get to the pool I wait on the seat for my instructor. When I see him I say hello. When we get into the pool my instructor tells me what activities I will be doing. The activities may be floating on my back or front, blowing bubbles under water, kicking my legs, and practicing my arm actions. I learn fun new skills all the time. I have to remember to listen to the instructions. There are other children in my lesson. We take turns. I need to remember to wait for my turn. When the lesson is over I get out of the pool straight away so other children can start their lesson. When I listen to my instructor, follow instructions and take turns, swimming lessons are lots of fun.

# Case study 4

## Inclusive Sport for Development: Ethiopia



Cheshire Foundation – Action for Inclusion



# Inclusive Sport for Development: Ethiopia

## Aims of the project

- Create a sustainable inclusive sport programme based in the city of Bahir Dar centred on the CF-AI organisation
  - Develop a city-wide inclusive sport infrastructure in 9 kebeles (sub-cities)
- Train a team of inclusive sport coordinators to staff the programme
- Once embedded, create a cohort of Master Trainers to support nationwide development

# Inclusive Sport for Development: Ethiopia

## Process

- Network of kebele (sub-city) coordinators trained and supported over 3-year period
- Daily inclusive sports sessions delivered in the kebeles
- Collaborative links established between CF-AI and education (including HE), sports federations and local government agencies

# Inclusive Sport for Development: Ethiopia





# Inclusive Sport for Development: Ethiopia



# Inclusive Sport for Development: Ethiopia

## **Some key principles**

- Longitudinal approach – time!
  - Empowerment
- Stick to principles – but apply local context
  - Engage local community





# Discussion and questions





# Thanks - next webinar

**27<sup>th</sup> April 2016**

Dr Okey Ogu Charles

Challenges confronting individuals with disabilities  
in Nigeria: Practical viewpoint on APA

