Serious Immersion or Experiential Visualisation

Vin Sumner, CEO, Clicks and Links Ltd
“Tell me and I forget, teach me and I may remember, involve me and I learn.”

- Benjamin Franklin on the subject of Virtual Reality
It’s like learning how to ride a bike

Explaning how to ride a bicycle
This information sheet aims to help you and your child to learn to ride a bike.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Teaching tips</th>
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<td>Removing the pedals makes scooting easier (balance bikes can also be purchased).</td>
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Adapted with kind permission from Northumberland PCT Children’s Occupational Therapy Service.

Hints on Bike Riding from the Dyspraxia Foundation
- Bumps and bruises can be minimised if the child wears long trousers and long sleeves.
- Practice at the weekends and during holidays when things are more relaxed and the child is less tired from school.
- Drop the saddle so that the child’s feet can rest flat on the ground. This increases feelings of security for children with poor balance.
- It may help to take the peddle off at first, and let the child push the bike with their feet, while their balance and confidence improves. Encourage the child to lift their feet and move a short distance while holding their balance.
- It is a little easier for children to balance on bikes with wider tyres.
- If you are helping your child to learn to ride a bike by running along and holding the saddle, make sure you stand a little behind the child. They won’t then notice when you let go.
- Stabilisers can be released gradually. Teach the child to listen to the sound of the ‘trainer’ wheels on the ground; when they can’t hear this sound any more then don’t need stabilisers.
- Alternatively, remove one trainer wheel until the child becomes confident enough to do without it.
- It is possible to buy special stabilisers to help improve riding balance. The trainer wheels are gradually moved in towards the main wheel so that the base for balancing on is reduced. These are available from Good Designs, 153 Morton Lane, East Morton, KIRKLEES, West Yorkshire BD22 9RG, Tel: 01274 884852, email: info@gooddesigns.eu. Adjustable stabilisers can be purchased on their website at www.gooddesigns.eu.
- Some families have reported that starting the child off on a gentle slope has helped. The child pulls their feet on the peddle while the adult supports the bicycle. The child then ‘feels’ the peddle moving round.

Alternatives to traditional bike riding include:
- Using a 3-wheeler
- Scooters
- Riding a tandem

The Hertfordshire Dyspraxia Foundation Support Group have previously organised bike riding lessons for their members.

http://dyspraxiafoundation.org.uk/
Visualisation - Charts to Collaborative AR/VR

- Charts, Graphs and Diagrams
- 2D Maps
- Dashboards
- 3D Models
- 360 Video
- Interactive 360 Video
- Augmented/Mixed Reality
- Virtual Reality
- Collaborative AR/VR (Serious Immersion / Experiential Visualisation)
Interactive 360 Video (i360)

i360 platform allows easy build

interactive modules consists of a pre-recorded 360 video/photo scenario

They are playable through a player’s own smartphone using Google Cardboard or Oculus-Go

Players are immersed in a 360 degree environment

Provide information, Identify hazards and good practice, ask questions

Co-op Retail, Murphy Construction, EDFEnergy, MCC, CityVerve
Collaborative AR/VR (eXperium)

- Immersive Experiences
- Scenes built from CAD/Photos/Scans/Video
- Interact with the scene
- View real time data
- Output results in many forms
- Object Recognition
- Multiple users in VR or AR
- Collaboration (communication, data exchange)
- Different devices (AR/VR)
Input Data

- Design
  - Design Model

- As-built
  - Capture data
  - Lidar
  - Photos
  - Video
  - 360
  - 3D mapping Software
  - 3D Model (Pointcloud/Mesh)

Other data
- Schematic Drawing / Reports / X-Ray / Real-time sensors

Visualisation

- Web (online)
- Desktop & Tablet

Interaction/Analysis (in App & VR)

- Annotate
- Measure
- Compare (timelapse)
- Object Classification
- Move Objects
- Multi user

Export

- Database
- 3D model
- Reports
- 360 Video
- VR/AR
VR Inspection
It’s like learning how to ride a bike

Explanatory & Teaching tips
- **Able to put helmet on independently:**
  - Practice fastening the buckle before putting helmet on.
  - Start with longer strap initially to avoid anything pulling the hair.
  - Use of a mirror may help to locate the buckle if this is hard when wearing the helmet.

- **Able to hold both handles and push bike in a straight line while walking beside it:**
  - This is important in terms of safety for crossing roads.
  - It helps to start with this to learn how to handle the bike.
  - Children sometimes tend to walk too close to the bike and fall into it, so give hints to stand further away.
  - Emphasise the need to LOOK around and LISTEN for safety.

- **Able to hold handles and push bike round a corner while walking beside it:**
  - One guidance to run a large enough circle so the bike does not lean excessively while turning the circle.
  - As children become more confident or if space is limited they may be able to hold under the saddle with one hand to lift the back wheel into position.
  - It is important in terms of safety to learn how to use the brakes before learning how to ride.

- **Able to mount bike:**
  - Placing both hands on the handles and brakes if necessary.
  - Practice getting on and off the bike from the side holding both handles. Use the brakes if the bike moves or you are on a slope.

- **Able to dismount:**
  - Keeping both hands on the handles, holding the brakes.
  - Take tight leg over the back wheel, to end up standing on the left hand side.

- **Able to assist on bike sitting on the saddle, not standing up, taking “walking steps” (pedals removed):**
  - Removing the pedals makes scooting easier (balance bikes can be purchased).
  - This is the start of learning how to balance.

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