**Universal Design**

# Universal Design embracing the whole mosaic that forms society: Ireland's Story

Keynote Day Two

**Dr Ger Craddock**
**Centre for Excellence in Universal Design**
**National Disability Authoirity, Ireland**

**www.universaldesign.ie**

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# "seeing the whole mosaic that forms society, instead of the individual pieces we call minorities, has finally caught on"

Victor Papanek "design for the Real World"1986 p68

Universal Design Allows Us to see the Whole System

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# Soft and Hard Technologies

"For Universal Design to transcend its **"soft"** ideals and to be taken seriously in the pragmatic world of planning, designing, and construction, a rigorous and accountable approach must be taken in measuring and analyzing universal design performance. Universal Design needs to move in the direction of **"hard science and facts"**
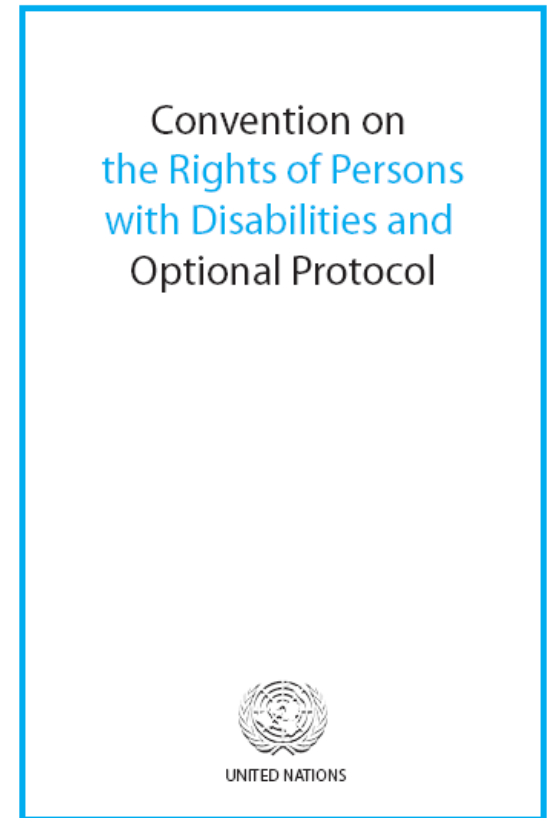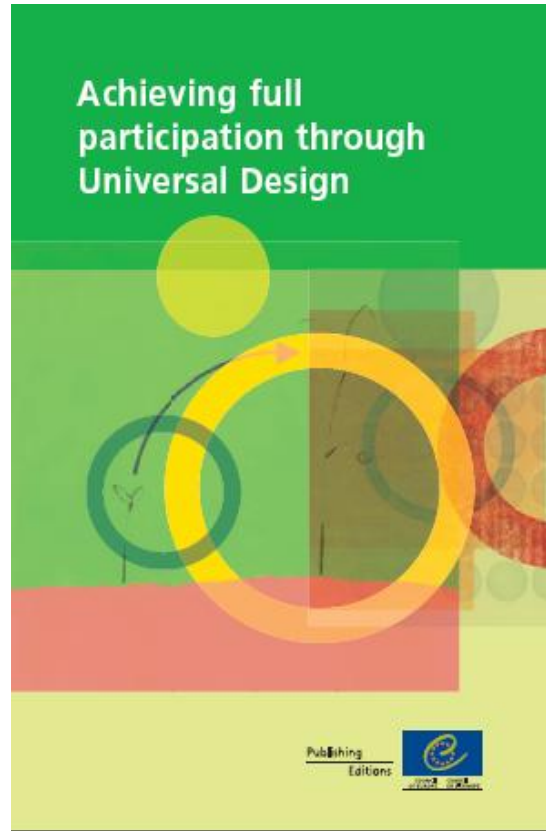
Wolfgang Preiser  P 38.4  UD Handbook 2nd edition 2011.

Our Challenge : Discover, Define, Develop and Deliver on both the soft and hard technologies

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# WHO (2011), Council of Europe(2009) and UN (2006) Publications

**Defining Universal Design**



WORLD REPORT ON DISABILITY

World Health Organization   THE WORLD BANK



Achieving full participation through Universal Design

Publishing Editions



Convention on the Rights of Persons with Disabilities and Optional Protocol

UNITED NATIONS

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# WHO global Report on disability
# June 2011

Initial efforts should aim to build a "**culture of accessibility**" and focus on removing basic environmental barriers.

Once the concept of accessibility has become ingrained and as more resources become available, it becomes easier to **raise standards** and attain a higher level of **universal design**.

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# A National Approach

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# Structure of the Centre in National Government

**Government and Politicians**

**Civil Service**

**Dept of Environment** → **Dept of Justice** → **Dept of Education…** →

**Public Service**

**National Disability Authority**

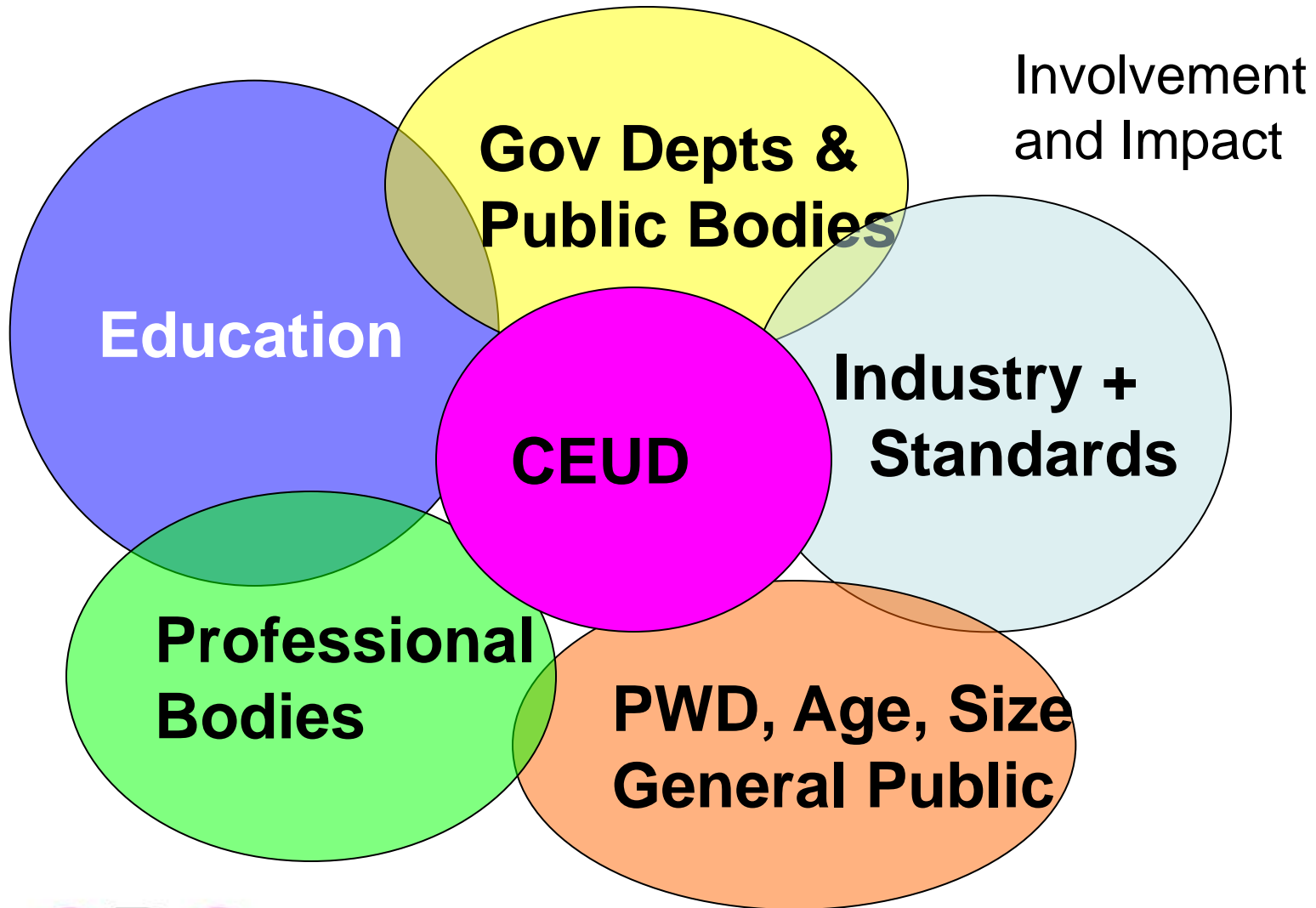**Centre for Excellence in Universal Design (2007)**

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# Core Areas of the CEUD

- Built Environment

- Information and Communication Technology (ICT)

- Products and Services

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# CEUD  Key Stakeholders

Involvement and Impact

**Gov Depts & Public Bodies**

**Education**

**Industry + Standards**

**CEUD**

**Professional Bodies**

**PWD, Age, Size General Public**

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# Aims of the Centre

- **Standards**
  - Stimulate research
  - Participate in Standardisation work nationally and internationally
  - Provide advice to stakeholders
  - Encourage compliance
- **Education and Professional Development**
  - Incorporation into design curriculum
  - Application of Universal Design for Learning approach to teaching and examinations
- **Awareness**
  - Best practice database
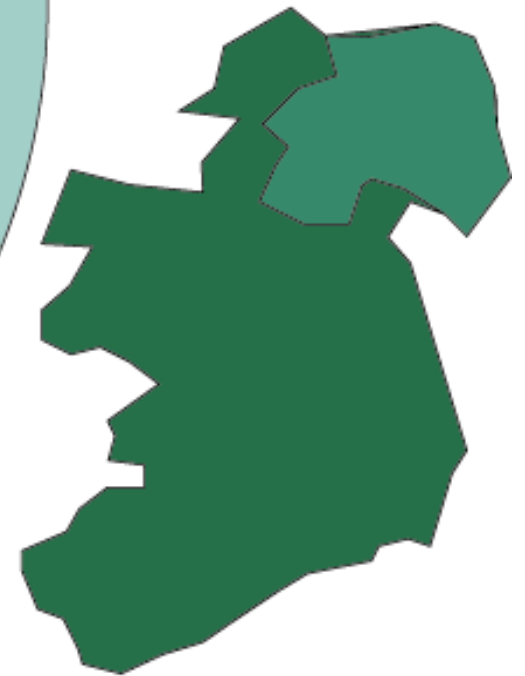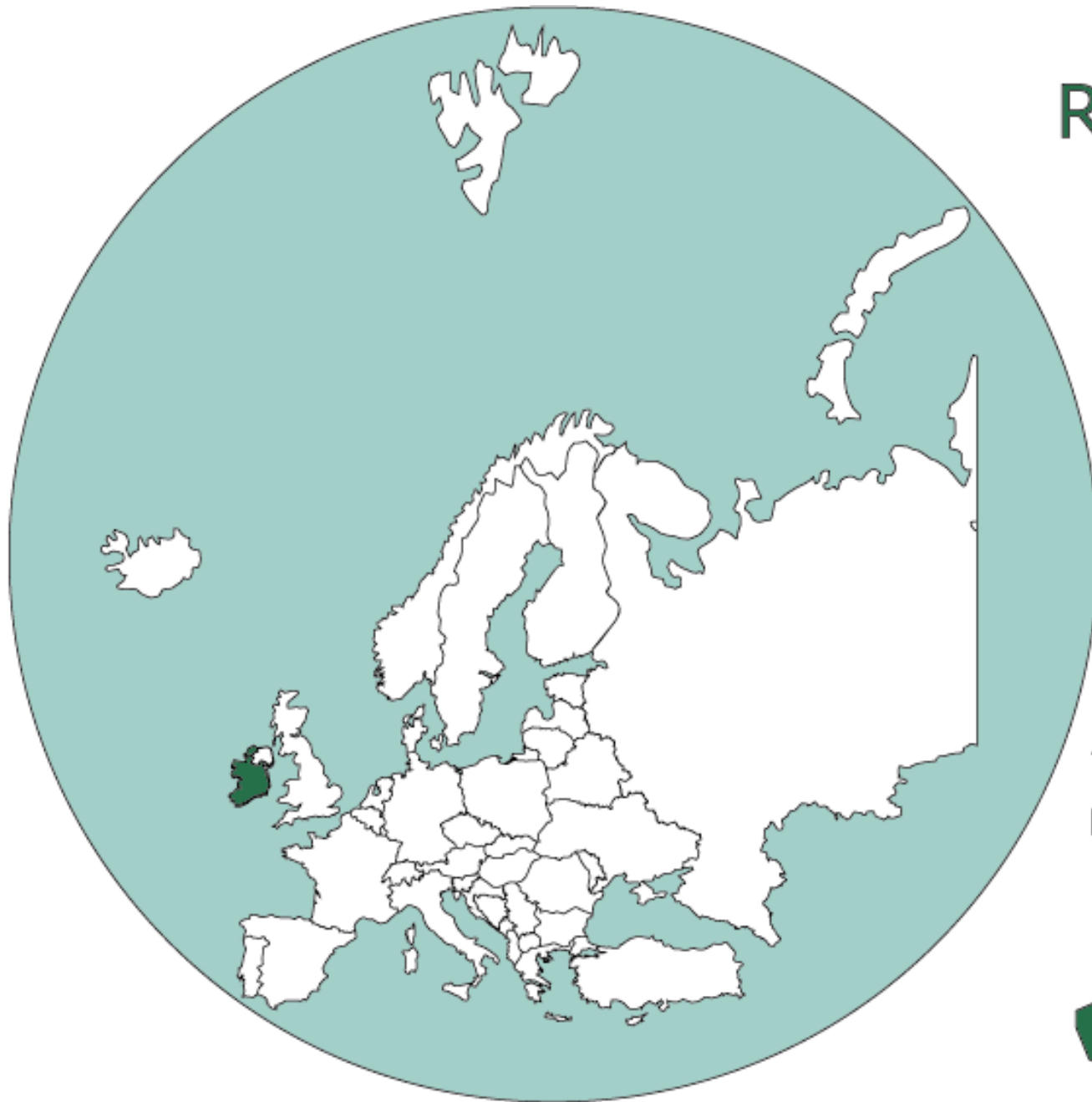  - Promote awareness and understanding

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# The Question?

**What ingredients were part of the mix for Ireland to Legislate and fund a Centre for Excellence in Universal Design?**

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# Republic of Ireland

# BC – Before The Commission

**- Gov setup a commission to investigate the status of People with Disabilities in Irl 1993-95**



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# Strategy For Equality 95

Result of the Commission was a report called "A strategy for Equality"
Disruptive (soft) Technology

- People with Disabilities came up with 402 Recommendations:- All Sectors

- Key: Disability Defined within a Social Model

- Legislation introduced would be "rights based"

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# Decade of Policy Change in Irl

- The Employment Equality Act 1998
- National Disability Authority Act 1999
- The Equal Status Act 2000
- The Equality Act 2004
- The Education for Persons with Special Educational Needs Act 2004
- The Citizens Information Act 2004.
- The Disability Act 2005
- The Citzens Information Act 2006 -Advocacy

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# Key elements of the Equality Acts
## 1) Legislation

- Illegal to discriminate against worker or job applicant with disability

- Discrimination is in context of worker being able to do core job

- Employer must reasonably accommodate disability – if cost not disproportionate

- Premises serving the public must be accessible – if cost of doing so is nominal

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# Equality
## 2) Infrastructure

- Equality Authority 99
- Equality Tribunal 99
- National Disability Authority 2000
- National Council for Special Education 05

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# Gov: National Disability Strategy 06-16 - sets the Agenda for Change

- Disability Act 05

- Education of Persons with Special Needs Act 06

- 6 Sectoral Plans

- Multi-annual funding for high support needs

- Citizen Information Bill re advocacy

- Equality Acts as foundation

- Overseen by interdepartmental Senior Officials Group **chaired by D/Taoiseach -Champion**

- Cabinet Committee on **Social Inclusion**

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# Six Sectoral Plans Government Departments

- **Dept of Communications, Marine and Natural Resources**, - Comreg (Communications Regulator),
  - BCI (Broadcasting Commission of Ireland)
- **Dept of the Environment, Heritage and Local Government,**
  - **BRAB** – Building Regulations Advisory Board
- **Dept of Transport.**
  - (National Transport Authority)

- Dept of Enterprise, Trade and Employment,

- Dept of Health and Children,

- Dept of Social and Family Affairs,

# Legal requirements for all Sectoral Plans

- Information on relevant regulations/codes of practice

- Complaints procedure (appeal is to Ombudsman)

- Monitoring and review procedure

- Intervals for progress reports

- Levels of access to services specified in Plan

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# Accessible public services
# Part 3 Disability Act

**Public bodies must**

- Ensure people with disabilities can use mainstream public services

- Provide information in ways that suit the needs of people with disabilities (e.g. large print, Easy to Read)

- Buy in accessible goods and services

- By 2015, have accessible premises

- All "where practicable and appropriate"

- NDA **Code of Practice** on services, information, procurement **Gov/Public Bodies Only** – Regulatory Instrument

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# NDA Code of Practice On Accessibility of Public Services and Information provided by Public Bodies

- – Statutory Instrument to support public bodies in fulfilling their statutory obligations under sections 26, 27, 28 Disability Act 2005
- – Compliance with Code means compliance with the Act

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## Dept of Environment: Part M of the Building Regulations

- Access for People with Disabilities (2000)
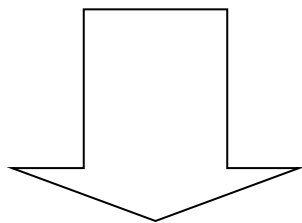
- Revised and called - Access and Use (2010)

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# Irish Examples

– Public Transport and Buildings now accessible

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Public Services

Public
Services

**Built Environment**
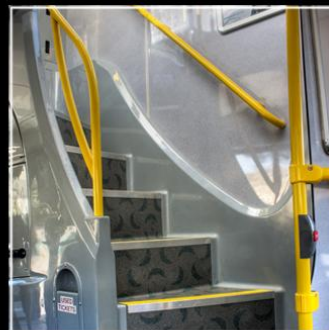
# Universal Design
as defined in the UN Convention , Council of Europe and Irish Legislation

- **UN Convention Art. 4**

- to promote universal design in the development of standards and guidelines

- **Co of Europe 6**

- Guidelines, standards, training of professions

- **Disability Act 2005**

- Centre of Excellence in Universal Design
  - Develop and promote standards
  - Education of design professions
  - Work with professional bodies

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# Legislation – Ireland

- Disability Act 2005
  - Centre for Excellence in Universal Design

- Public Procurement Directives (2004/17/EC and 2004/18/EC)
  - Emphasis on value for money and accountability
  - Offer possibilities to integrate the use of Universal Design requirements in the technical specifications of the contract documentation for public bids

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# Standards

Example of how the centre frames its work from a global to a local perspective:

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# Universal Design and Global Standards Bodies:

to maximize the number of people who can readily use a product, building or service which may be achieved by:

(i) designing products, services and environments that are readily usable by most users without any modification,

(ii) by making products or services adaptable to different users (adapting user interfaces), and

(iii) by having standardized interfaces to be compatible with special products for persons with disabilities.

**(Standards Bodies: ISO, CEN, NSAI)**

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# Standards Key Points to Consider

- Inclusive process, open to all stakeholders
- Responsiveness to public interest needs
- Creation of a level playing field
- Enhanced competitiveness
- Market  acceptance and high quality
- Stability and predictability
- Cheaper solutions
- Interoperability

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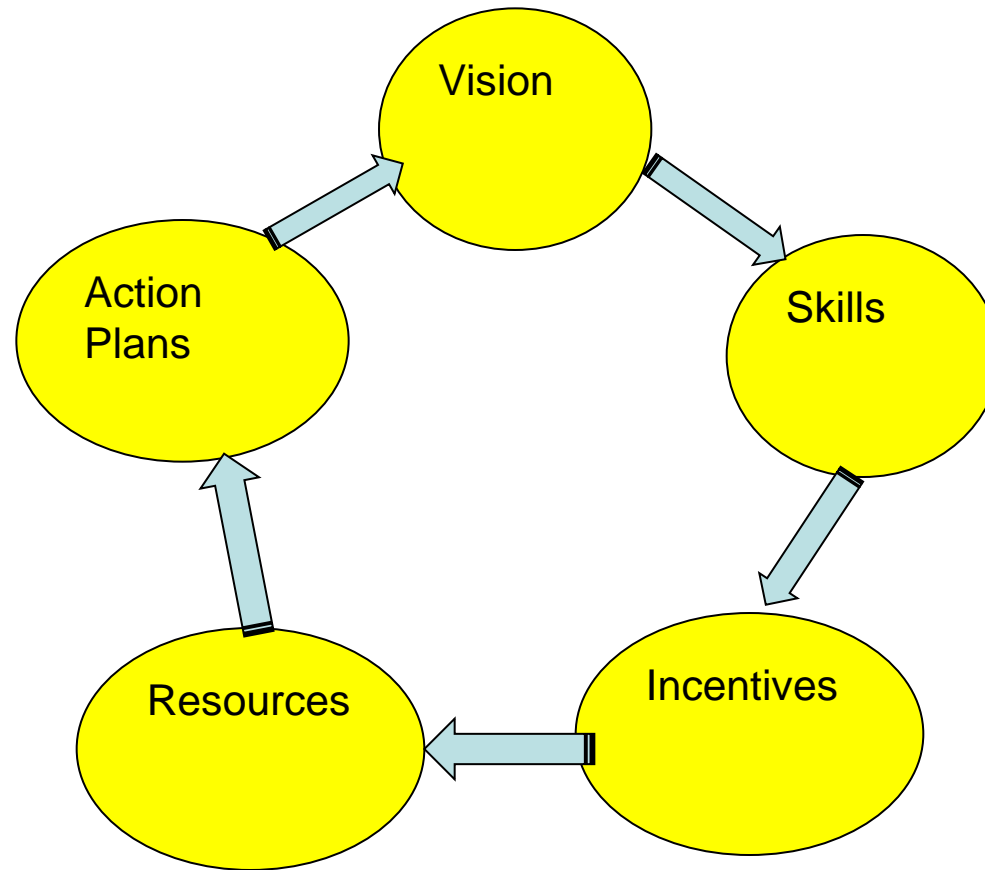
# Systems Approach:

framing and understanding the complexity of change:

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# Virtuous Cycle of Systems Change



5  Elements

*Adapted from J. S. Thousand & Richard A. Villa: Managing Complex Change;  2001*

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# Dimensions of change

| Vision | Skills | Incentives | Resources | Action Plans | Success |
|--------|--------|------------|-----------|--------------|---------|
|        | Skills | Incentives | Resources | Action Plans | Confusion |
| Vision |        | Incentives | Resources | Action Plans | Anxiety |
| Vision | Skills |            | Resources | Action Plans | Slow Change |
| Vision | Skills | Incentives |           | Action Plans | Frustration |
| Vision | Skills | Incentives | Resources |              | False Starts |

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# Examples of National Initiatives lead by the Centre

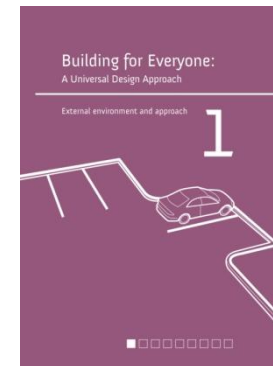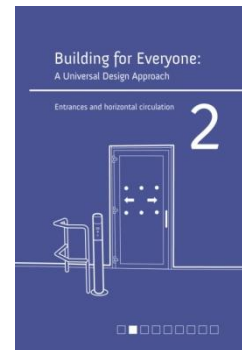Covering Built Environment, ICT and products/services

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Universal Design Buildings Guidelines
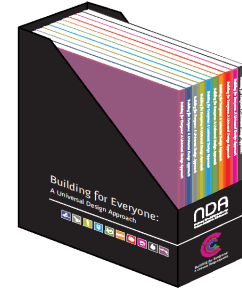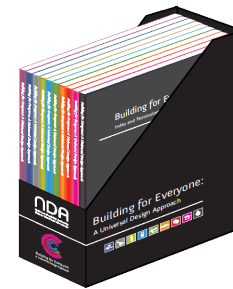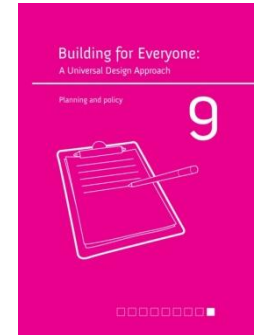
Environment

Shared Spaces, Shared Surfaces and Home Zones Research and Recommendations for Ireland

Building for Everyone:
A Universal Design Approach

External environment and approach

1

Building for Everyone:
A Universal Design Approach

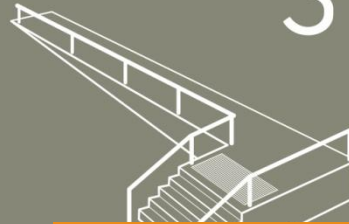Entrances and horizontal circulation

2

Building for Everyone:
A Universal Design Approach

Vertical circulation

3

Building for Everyone:
A Universal Design Approach

Internal environment and services

4

Building for Everyone:
A Universal Design Approach

Sanitary facilities

5

Building for Everyone:
A Universal Design Approach

Facilities in buildings

6

Building for Everyone:
A Universal Design Approach

Building types

7

Building for Everyone:
A Universal Design Approach

Building management

8

Building for Everyone:
A Universal Design Approach

Planning and policy

9

Building for Everyone:
A Universal Design Approach
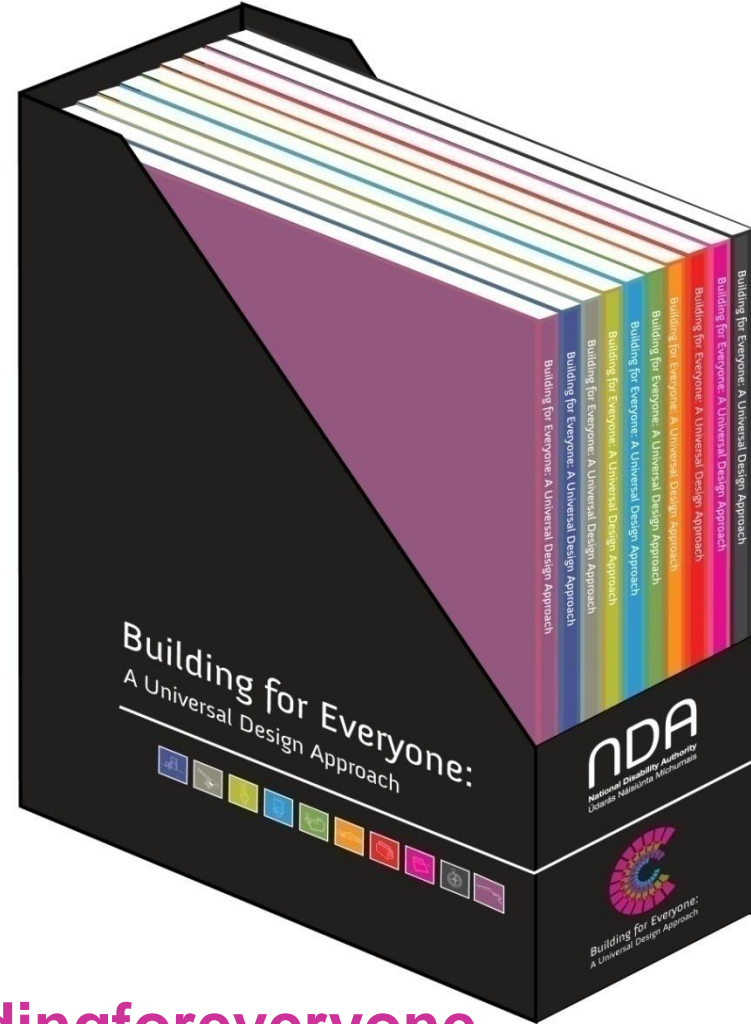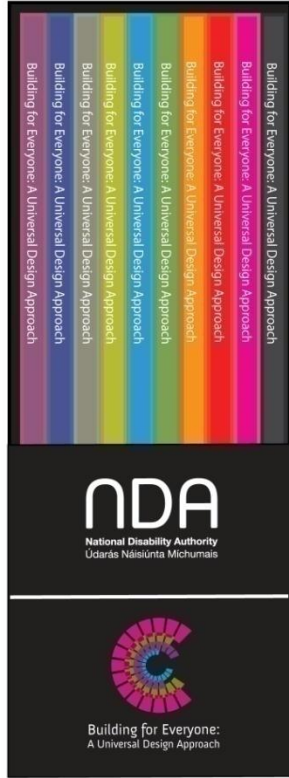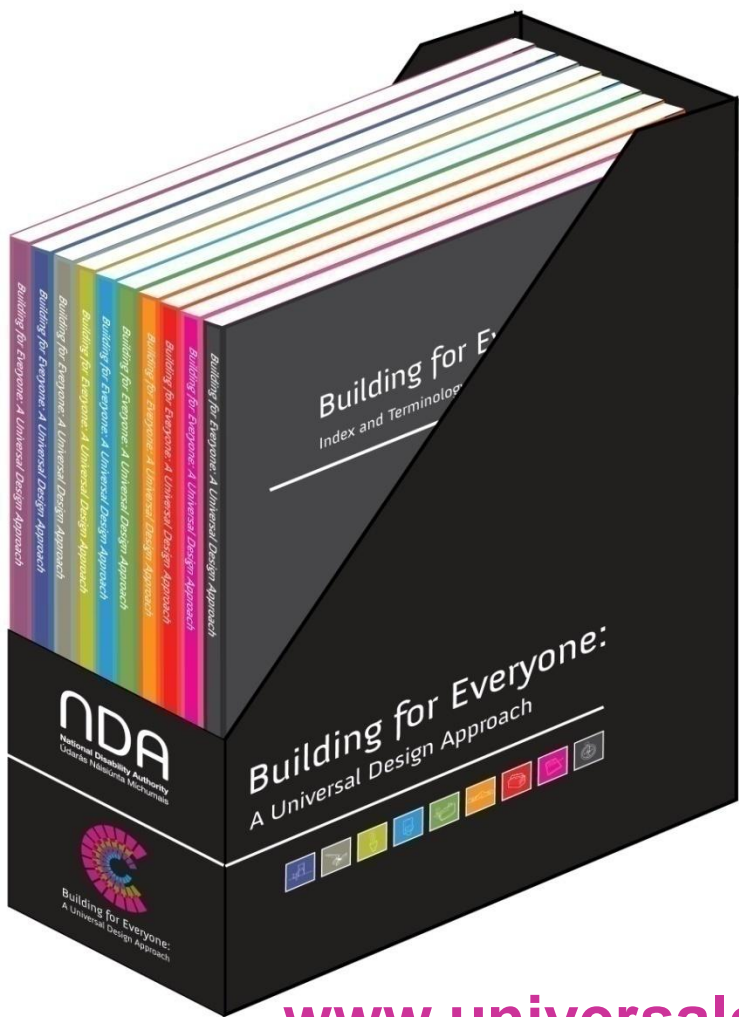
Index and terminology

10

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Free to download as Accessible PDF's from the Centre for Excellence in Universal Design

www.universaldesign.ie/buildingforeveryone

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**Universal Design Guidelines For Homes in Ireland**

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2013

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The purpose in producing Guidelines for Universal Design (UD) Homes is to:

•Inspire people to think differently about better quality homes for everyone.

•Assist in the design and delivery of UD Homes through practical guidelines.

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# Universal Design of an Educational Campuses



**The Design & Engagement Process** must operate at all scales, from Macro to Micro, and it must include all stakeholders at all levels, while fully considering how they interact at each level and between levels

**UD - Placing Learning at the Centre of the Community - At the Macro, Meso & Micro Scale**
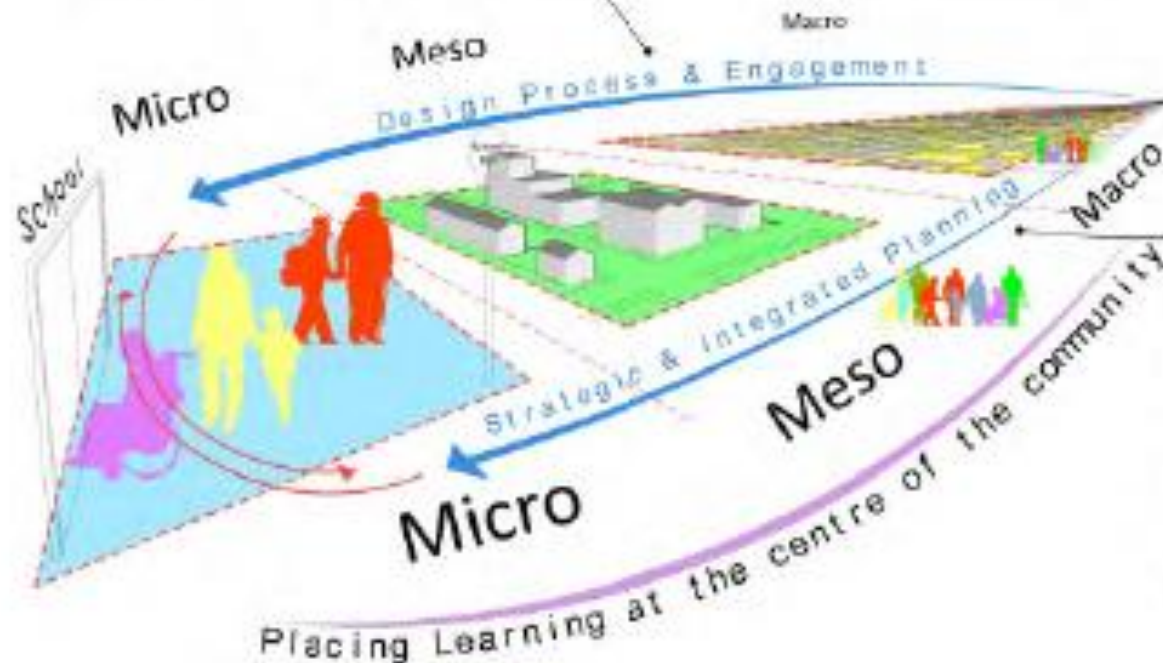
**Integrated & Strategic Planning** with a long-term view that operates at all scales and considers how the physical journey from home to classroom caters for student 'access, participation & progress'

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# Information Communication Technologies

1) National Universal Design Guidelines for Digital TV Equipment and Services

2) Research and National guidelines on the Lived experience of people using public sector websites

3) Trialing Universal Design Assessment Tool for assessing use/non-use of technology by Older People

# Size Data for Universal Design in Ireland (Anthropometry Research, Penn State, USA)



**UNIVERSAL DESIGN**
DESIGNING FOR BODY SIZE AND SHAPE

### Accommodation

Users that are able to interact with a design in the intended manner are said to be **accommodated**. Those for whom the design is uncomfortable, unsafe, or are otherwise unable to achieve the desired performance are said to be **disaccommodated**. One goal of Universal Design is to accommodate users regardless of body size and shape.
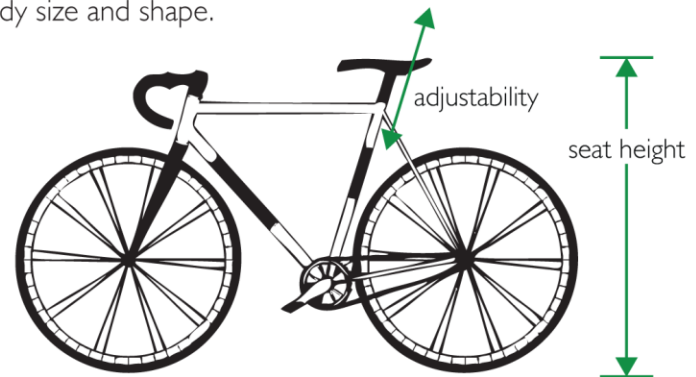
## ADJUSTABILITY

Incorporating adjustability into a design is one method of accounting for body size and shape. For example, a

adjustability

seat height

# National Awards in Universal Design

Another Key Driver on getting Universal Design as part of the lexicon of designers

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# Institute of Designers in Ireland Universal Design Award



**White Zebra Studios The Comfee Seat**



**Dublin City Council Free WiFi**





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# Royal Institute of Architects Ireland Annual Architecture Awards 2013 & 2014

**1ˢᵗ Universal Design Award sponsored by CEUD**

**2013 Winner (and also Peoples Choice Award) – UCD Student Centre**

**2014 Winner Family Home, Dublin**





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# Universal Design Challenges

Another key driver for change – on getting multidisciplinary teams working together

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# Universal Design Grand Challenge

## 2014 and 2015



https://www.facebook.com/UDGrandChallenge

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# Universal Design and the centre as a "Safe Harbour" – Honest broker

How the centre and the concept of Universal Design is an umbrella for diverse stakeholders to find shelter and in so doing share their similarities and embrace their differences

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# Irish Celtic Mythology applied in the 21ˢᵗ Centaury

The Fifth Province is a metaphor taken from Irish Celtic mythology and represents a 'space' (Safe Harbour) wherein different and often opposing realities might meet and engage.

metaphor was its orientation towards holding together conflicts, oppositions and contradictions in a non-dualistic, **both/and** formation.
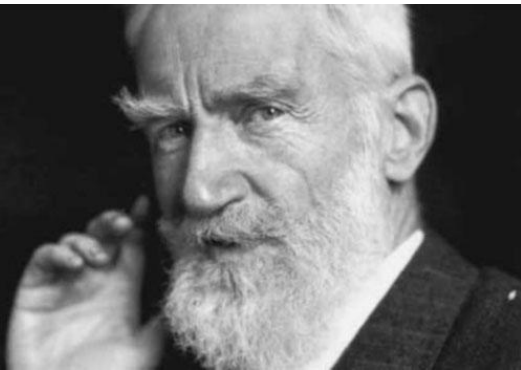
http://www.imeldamccarthy.com/Publications_and_Downloads_files/The%20Fifth%20Province%20and%20Spirituality.pdf

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# The Mythical fifth (Irish-Cuige) Provence

"The Irish are an eminently fair race,
they never speak well of each other". George Bernard Shaw

# Celtic myth of the Fifth Provence

" the Fifth Province was that place in each of us that was open to the other. "
"A metaphor for plurality, for openness, for tolerance, for the healing of conflicts and the acceptance of each other."

"Now, at last maybe we could begin to speak well of and to one another on the whole of this island."

Mary Robinson. acceptance speech on being the 1st woman president of Ireland. Later to become the UN High Commissioner for Human Rights

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# " The Mythical Thin Place" Applied in the 21st Centaury

 A thin place is a place of **energy**. A place where the veil between this world and the eternal world is thin. A thin place is where one can walk in two worlds - the worlds are fused together, knitted loosely where the differences can be discerned or tightly where the two worlds become one. Thin places aren't perceived with the five senses. Experiencing them goes beyond those limits.

21st Centaury Applied:

How Universal Design philosophy, process and the Centre act as a "Place" where difference can be embraced and seen through a new Lens of collaboration.

design tools using critical and analytical thinking makes this a reality

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# Philosophy

Enabling all people to participate in a society
that celebrates human difference and to interact with
the environment to the best of their ability.

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# Process

- In terms of what parts involve generating ideas (creativity) and which parts involve selecting the best ideas (critical thinking).

| Discover | Define | Develop | Deliver |
|---|---|---|---|
| Explore needs, wants and preferences | Build specific designs and plans | Explore ways to implement designs | Deliver and evaluate completed system |
| **Creativity** | **Critical Thinking** | **Creativity** | **Critical Thinking** |

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# Raglan Road – My own "thin Places" – City and Country

Poet: Patrick Kavanagh



"On a quiet street where old ghosts meet I see her walking now"

Luke Kelly: Singer

# Going within and Going Beyond Ourselves

## "If we operate within an horizon of myths or a galaxy of assumptions, then our real needs will not be so easily identified"

We are required to reflect and understand on who we are first before we can be of benefit to others

Inglis,Tom quoted in Bassett, M et al (1989) For Adults Only, A case for Adult Education in Ireland, Aontas, National Association of Adult Education

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# Example of a Systems Approach for Change:

How to integrate Universal Design into Education from a Life Course Perspective

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# Centre For Excellence in Universal Design (CEUD)

**Standards**
- – Stimulate research
- – Participate in Standardisation work nationally and internationally
- – Provide advice to stakeholders
- – Encourage compliance

# Education and Professional Development

– Incorporate UD content into design curriculum

– Guidance on Universal Design for teaching, examinations and accreditation

**Awareness**
- – Maintain a best practice database (website)
- – Promote awareness and understanding (UD Challenge)

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# Universal Design Educational Strategy

## Aim:

To Develop curricula in collaboration with educational  stakeholders that will be trialled, tested and validated and that provides a model that can be replicated in other areas

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# Action Plan 2014-15

- Accreditation of Universal Design in 3$^{rd}$ level examinations systems

- CPD extended beyond ICT area to Product/Service and Built environmental Design professionals

- Key national stakeholders are **champions** of Universal Design – NCCA, QQI, Professional Bodies such as RIAI, Engineers Ireland   Institute for Designers in Ireland (IDI) etc…

- Further curricula development in key strategic courses at 3$^{rd}$ level as well as for CPD

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# Curriculum Materials for Universal Design
# in Third-level Education

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# Key Outputs of Project

- A Series of instructional materials and guidance for lecturers

- A series of <u>Irish</u> Case Studies of Universal Design in the Built Environment, Product Design and ICT

- A collection of personas that helps to understand diversity (The Normal Family)

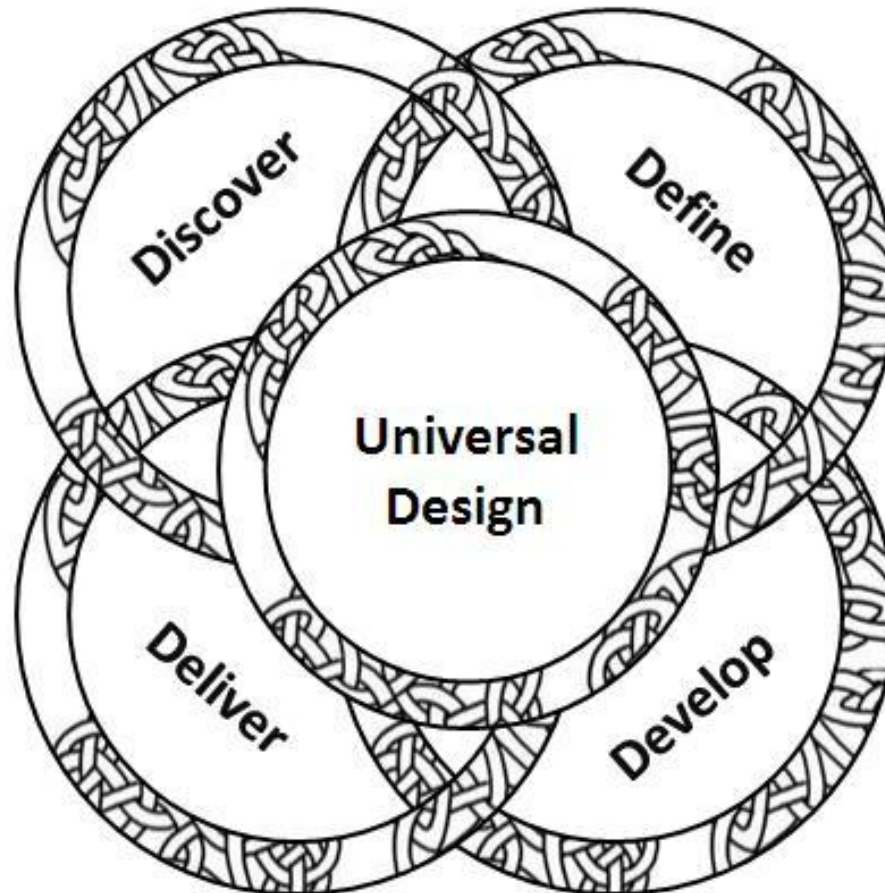- A new and agreed <u>Irish</u> Universal Design Process

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# Process

- In terms of what parts involve generating ideas (creativity) and which parts involve selecting the best ideas (critical thinking).

| Discover | Define | Develop | Deliver |
|---|---|---|---|
| Explore needs, wants and preferences | Build specific designs and plans | Explore ways to implement designs | Deliver and evaluate completed system |
| **Creativity** | **Critical Thinking** | **Creativity** | **Critical Thinking** |

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# Universal Design Process - Iterative

# Animation of a Family called the "Normals"



Available on Utube
https://www.youtube.com/watch?v=A88E4DH2asQ&list=PLlaJvOHx4FfCOwRT8ZN9zwCH0vA-sE7H6

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# Universal Design

# 2nd level Education

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# Designing our Tomorrows Ireland (DOT Ireland)

The module addresses ways to teach creative thinking in schools embedded with universal design principles in order to inspire young people to design a more inclusive world.

The material was developed by leading experts in universal design, creativity & education from the University of Cambridge, Loughborough University and the Royal College of Art.

The NDA funded the adaption and piloting of these resources for use at 2nd Level in Ireland.

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# Why we need this?

It is generally acknowledged that inclusion is an important issue on different social levels and the need for change in government and industry to reduce exclusion in society is recognised.

In addition promoting creativity in education is identified as a key priority.

DOT brings these two areas together to teach pupils how to apply creative approaches to design everyday things that are more inclusive.

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# Universal Design 2nd Level Irish Education Pilot 2011
# Designing our Tomorrow



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We have to work will all sectors including the private sector if our mission is to make our environment better designed for all citizens.

So using the term Innovation we need to embrace its latest form.

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# Innovation 2.0

Now is the time to initialise the debate on the **future wisdom society,** its values and principles. What is the new contract between citizens and the society, in the new era?

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# Quadruple Helix Innovation

Government, Academia, Industry and Citizens collaborating together to drive structural changes far beyond the scope of any one organization could achieve on it's own



Government

Academia

Industry

Citizen
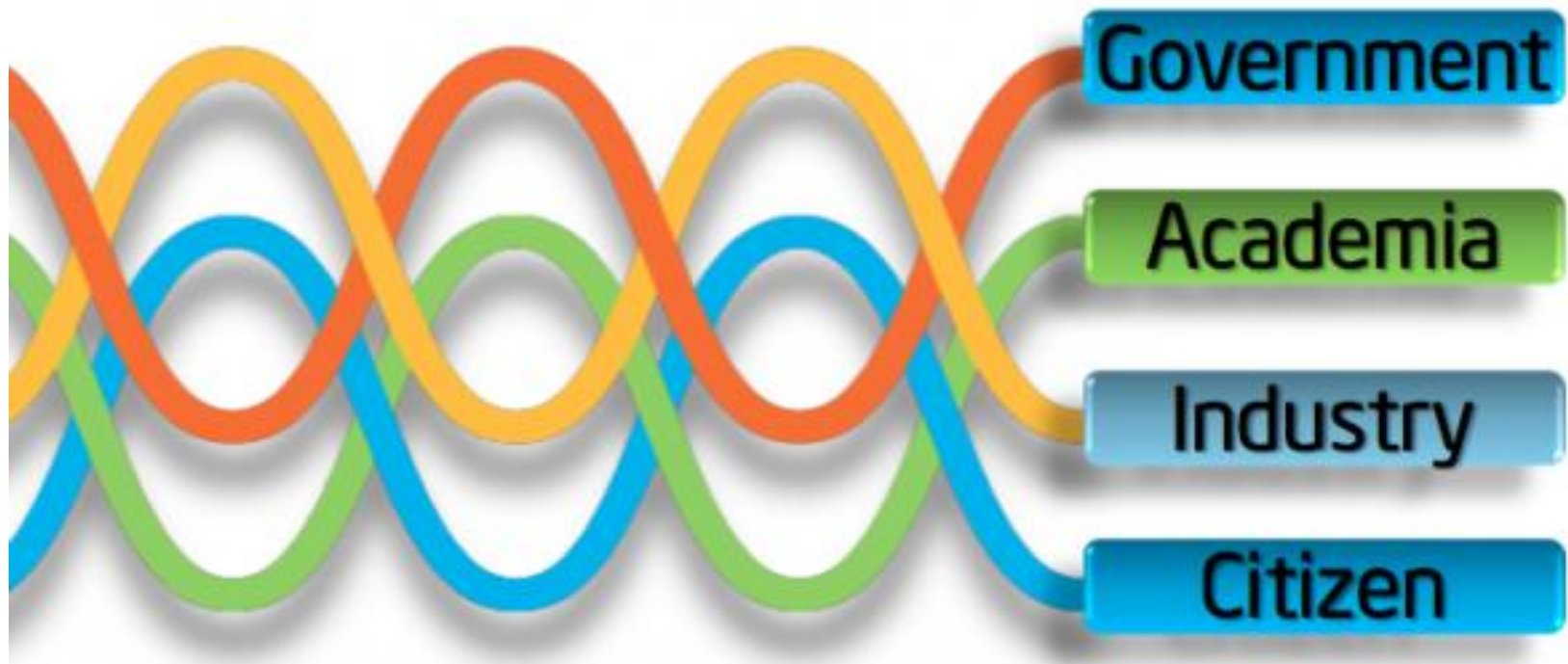
http://eu2013.ie/media/eupresidency/content/documents/competinformal/OI2_Innovation_Ministerial_MCurley_v1_0.pdf

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**Universal Design**

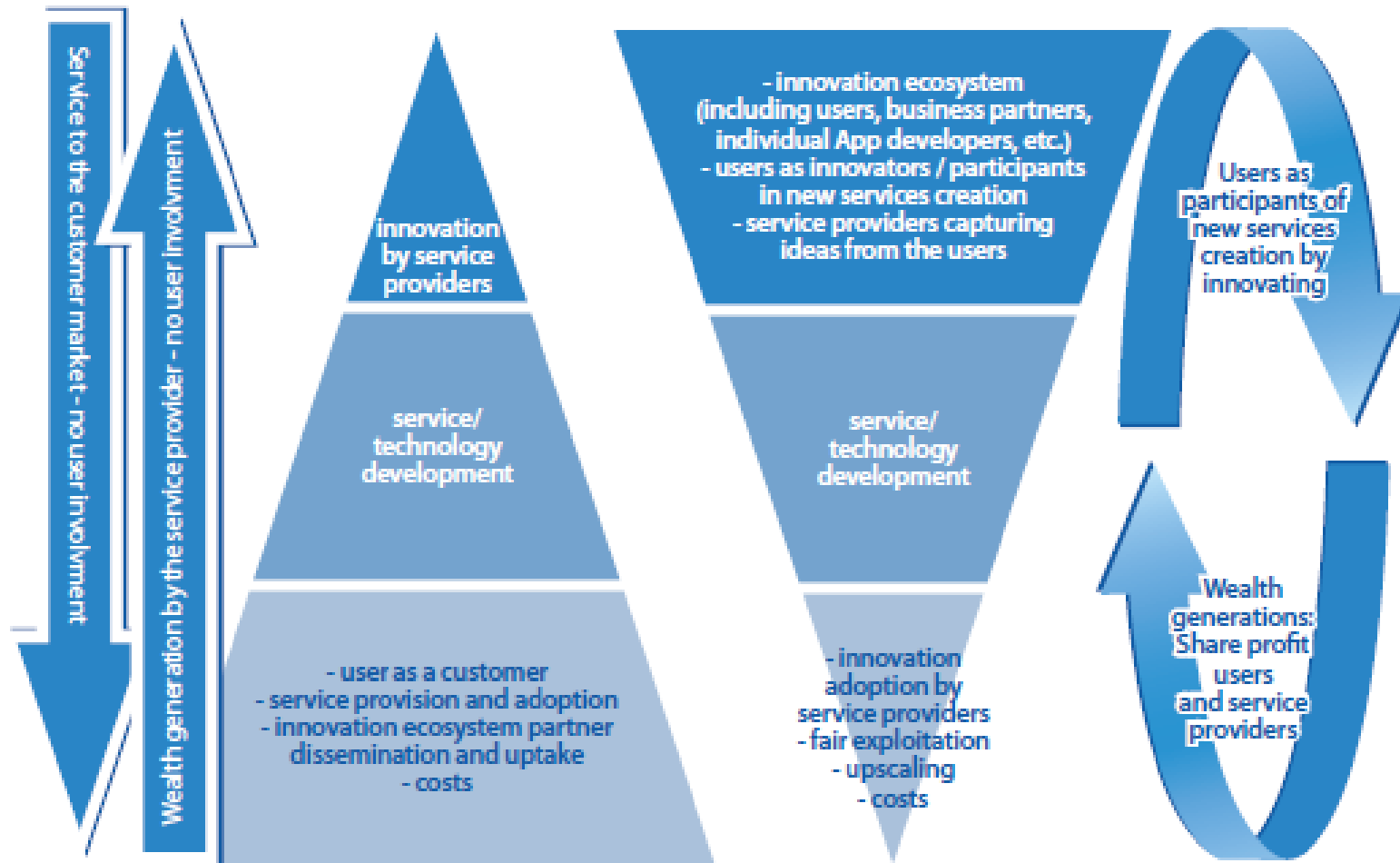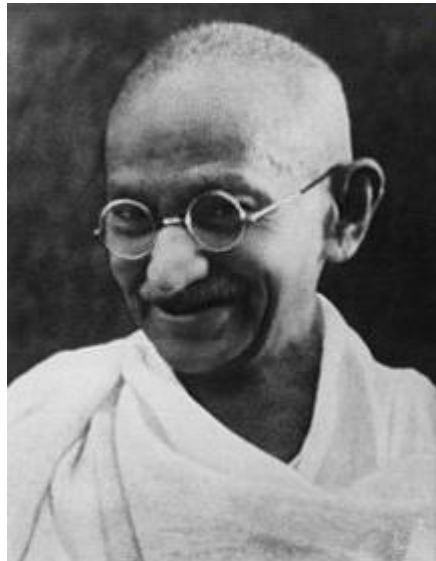Open Innovation 2012, European Commission DG information & Society

Open Innovation 2012, European Commission DG information & Society

"A policy is a temporary creed liable to be changed,
but while it holds good it has to be pursued with apostolic zeal"



We must not waste any more time as the time is now to embrace Universal Design as a key global as well as a national policy Driver for a better society for all citizens

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# Thank you

**WWW.UNIVERSALDESIGN.IE**

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