



**RCSI PUBLIC
and PATIENT
INVOLVEMENT
in RESEARCH**

Universal Design for Learning (UDL) & Public and Patient Involvement (PPI)

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Tuesday, 15th October 2024



OVERVIEW



What is UDL?

Background

Introduction to the framework



How does it relate to PPI?

Alignment with PPI values & principles

Examples of where it can be used



Actions

Individual activities you can embed



What is Universal Design?

The design and composition of an environment so that it may be accessed, understood and used

- to the greatest possible extent
- in the most independent and natural manner possible
- in the widest possible range of situations
- without the need for adaptation, modification, assistive devices or specialised solutions, by any persons of any age or size or having any particular physical, sensory, mental health or intellectual ability or disability.

In relation to electronic systems, it means any electronics-based process of creating products, services or systems so that they may be used by any person.

The Disability Act 2005



Ronald Mace

**Design
for all**

**Inclusive
design**

**Accessible
design**

**Barrier-free
design**

Universal Design for Learning (UDL)

UD for Education framework developed by CAST (US)

Latest edition: UDL Guidelines 3.0

Based on three core principles that guide the design of equitable learning opportunities

Multiple means of engagement

- the '**WHY**' of learning (motivation)

Multiple means of representation

- the '**WHAT**' of learning (content)

Multiple means of action and expression

- the '**HOW**' of learning (executive function)

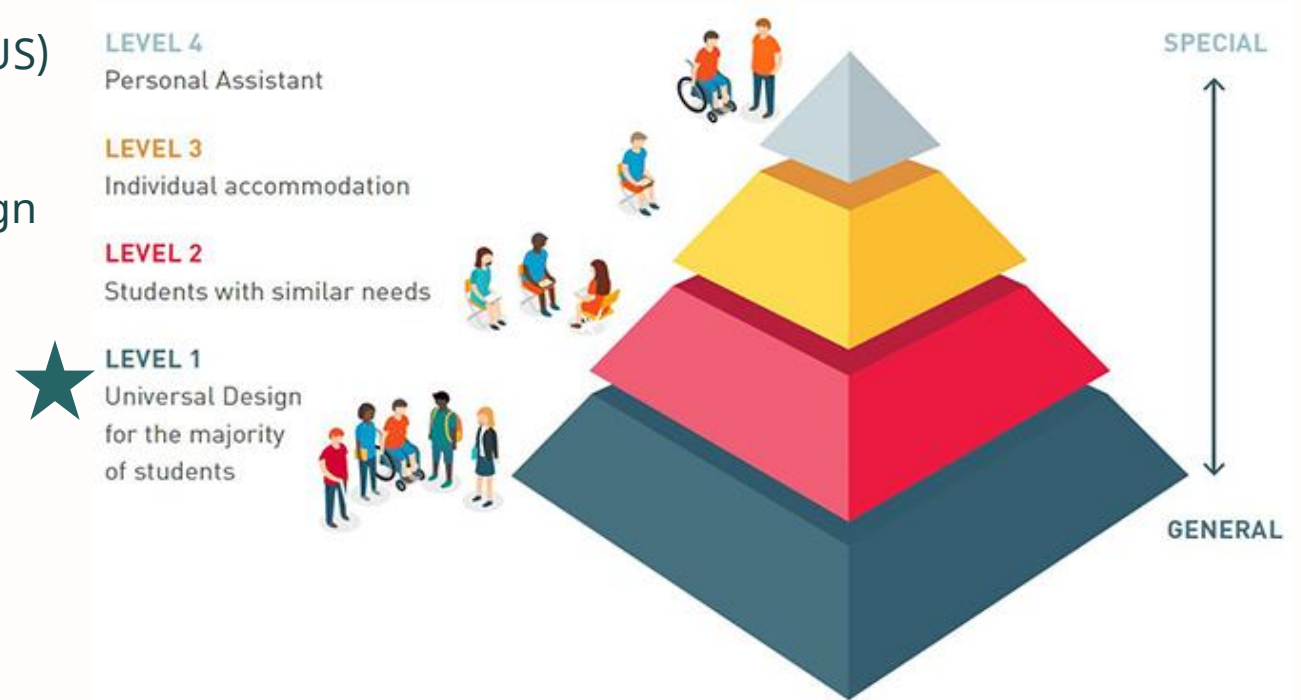


Image credit: <https://www.ahead.ie/udl-pyramid>

Design Multiple Means of **Engagement** →



Design Multiple Means of **Representation** →



Design Multiple Means of **Action & Expression** →



Support

Design Options for **Sustaining Effort & Persistence** (8) →

- Clarify the meaning and purpose of goals (8.1) >
- Optimize challenge and support (8.2) >
- Foster collaboration, interdependence, and collective learning (8.3) >
- Foster belonging and community (8.4) >
- Offer action-oriented feedback (8.5) >

Design Options for **Language & Symbols** (2) →

- Clarify vocabulary, symbols, and language structures (2.1) >
- Support decoding of text, mathematical notation, and symbols (2.2) >
- Cultivate understanding and respect across languages and dialects (2.3) >
- Address biases in the use of language and symbols (2.4) >
- Illustrate through multiple media (2.5) >

Design Options for **Expression & Communication** (5) →

- Use multiple media for communication (5.1) >
- Use multiple tools for construction, composition, and creativity (5.2) >
- Build fluencies with graduated support for practice and performance (5.3) >
- Address biases related to modes of expression and communication (5.4) >

Executive Function

Design Options for **Emotional Capacity** (9) →

- Recognize expectations, beliefs, and motivations (9.1) >
- Develop awareness of self and others (9.2) >
- Promote individual and collective reflection (9.3) >
- Cultivate empathy and restorative practices (9.4) >

Design Options for **Building Knowledge** (3) →

- Connect prior knowledge to new learning (3.1) >
- Highlight and explore patterns, critical features, big ideas, and relationships (3.2) >
- Cultivate multiple ways of knowing and making meaning (3.3) >
- Maximize transfer and generalization (3.4) >

Design Options for **Strategy Development** (6) →

- Set meaningful goals (6.1) >
- Anticipate and plan for challenges (6.2) >
- Organize information and resources (6.3) >
- Enhance capacity for monitoring progress (6.4) >
- Challenge exclusionary practices (6.5) >

PPI

Public involvement in research is research carried out 'with' or 'by' patients or public rather than 'to', 'about' or 'for' them

It is an **active partnership** between patients, carers, family members, service users, friends, and members of the public (intended to be a very inclusive term) with researchers that **influences and shapes research**.

(NIHR, UK/HRB)



PARTICIPATION

People giving their data to researchers in a research study, as 'research subjects' or 'research participants'



ENGAGEMENT

Researchers communicating about their research with people



INVOLVEMENT

Researchers collaborating with patients/public across the research cycle

PPI

The 'what'

Involvement in what is being researched.

How have the public and patients been involved in identifying the research aim/topic etc.

- Helping the researchers explain their work better on a patient consent form for a clinical trial
- Suggesting different routes to finding participants for an interview study on teenage mental health

The 'how'

Involvement in how the research is taking place

How have/will patients have input into how the research is designed, undertaken managed etc.



- Working with a Parkinson's charity to identify research priorities for Parkinson's disease
- Co-writing a research grant with people with epilepsy for an epilepsy research project



Decisions

Having a voice in decisions.

Who makes the decisions about 'what' and 'how'?

The "acid test".

PPI Ignite Network Values and Principles

The PPI Ignite Network believes that, in order to improve public and patient involvement (PPI) in health-related research, there must be a shared understanding of the values and principles that underpin the work. We invite all researchers, PPI contributors, institutions and funders to consider how to uphold these values and principles when engaging in or supporting PPI activity.

Transparency

The need for **clear, open, mutual communication** between the research team and PPI partners about research decisions and progress.

We want transparency in developing a **clear, shared understanding of aims, roles, processes and other terms of involvement**.



Trust

The **building of reciprocal trust; this takes time to develop, is relationship based** and needs to be consistently worked on.

We want **everybody's opinion to be fully heard** and we want **confidentiality to be negotiated and respected**.



Collaboration & Partnership

The **inclusion of PPI partners** throughout the research lifecycle with commitments and expectations agreed from the outset, as much as possible.

We want true partnership where **all contributions are valued and respected equally**.



Respect

The **recognition of the roles, knowledge, insights, experiences, strengths, limitations and contributions** across the research team and PPI partners and throughout the research lifecycle.

We want to **benefit from the diversity of the team and partners**, and work together effectively and enjoyably.



Empowerment & Power Sharing

The inclusion as early as possible in **funding decisions, strategy and decision-making, the co-design and co-production of research**.

We want a **wide range of involvement strategies** to ensure that this happens.



Flexibility

The **recognition of the time and other commitments involved in PPI** and that this is **acted upon in the research plan**.

We want to **co-design appropriate changes and responses** to the experiences and to the views of PPI partners.



Equity & Inclusion

The active identification and **removal of barriers and creation of entry points** throughout the research lifecycle.

We want real co-design and partnership to take place that **values equally people's diversity of opinions, experiences, abilities, backgrounds and expertise**.



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



An Bord
Taighde Sláinte
Health Research
Board



IRISH RESEARCH COUNCIL
An Chomhairle um Thaighde in Éirinn

Aligning Values & Principles

| Universal Design | RCSI | PPI Ignite Network | National Access Plan |
|---|---|---|---|
| Equitable use Flexibility in use Simple and intuitive Perceptible information Tolerance for error Low physical effort Size and space for approach and use | Respect Collaboration Scholarship Innovation | Respect Transparency Empowerment & Power sharing Trust Flexibility Collaboration & Partnership Equity & Inclusion | Inclusivity Flexibility Clarity Coherence Sustainability Using an evidence-driven approach |

UDL & PPI

UDL: supporting learners to become competent and confident at learning itself (CAST)

PPI: the public and patients are involved in planning and doing research from start to finish and help tell the public about the results of research (PPI Ignite Network)

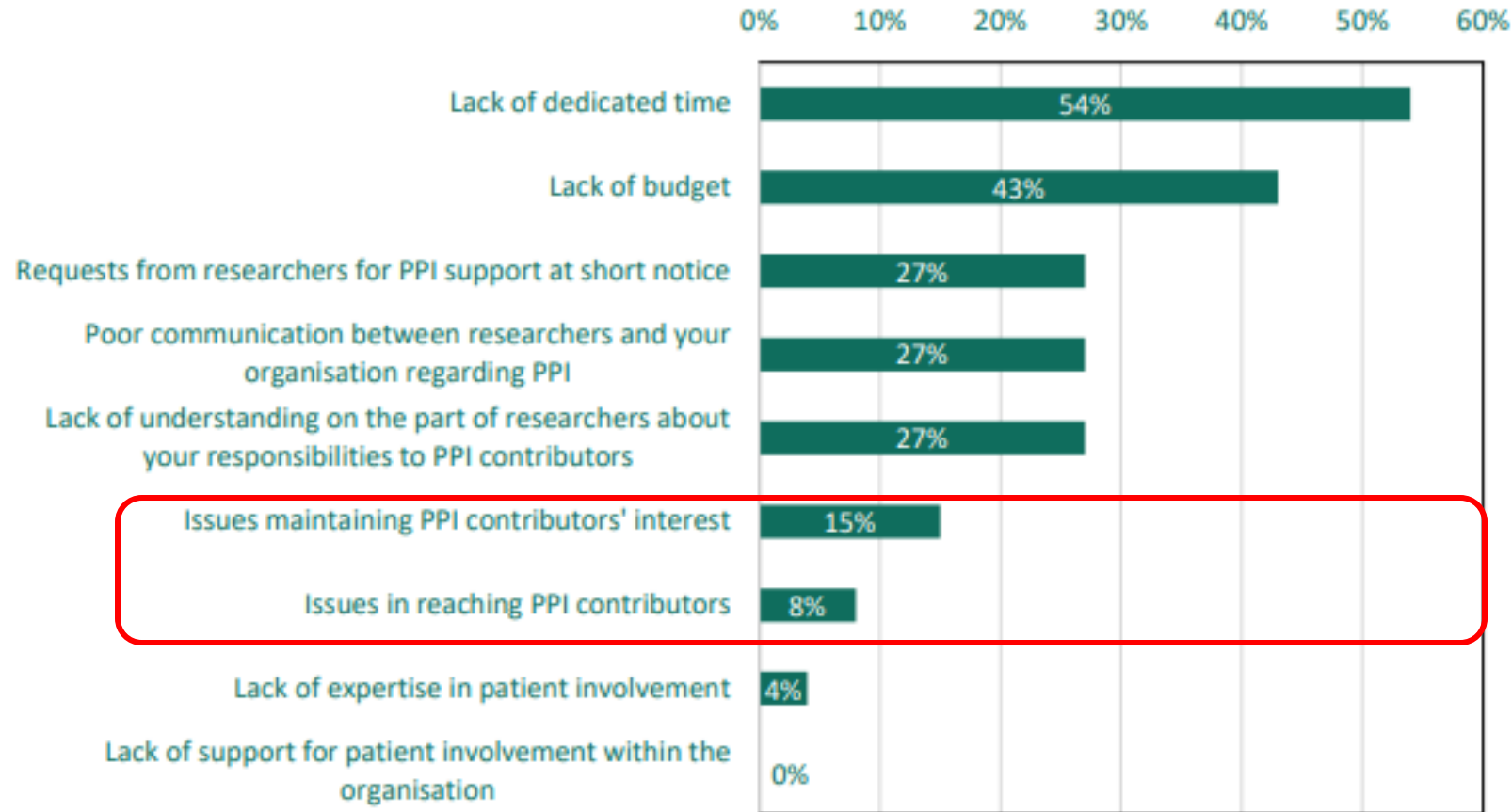
UDL Benefits for colleges

- A reduction in the need for individualised supports and the associated cost savings
- Better outcomes for all students, not just students with disabilities and international students
- Lower drop-out rates
- A more diverse student body

PPI Challenges

- Finding PPI contributors
- Time & resources
- Expectations
- Disengagement

Barriers to PPI that occur a great deal or a lot (N=26)

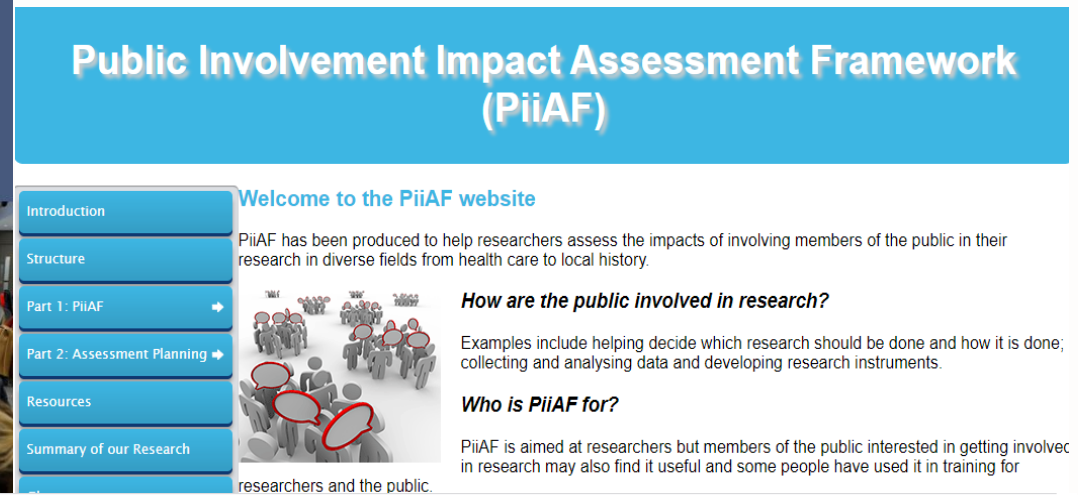


The role of health research charities in PPI: Results of a HRCI member survey [HRCI June 2024](#)

Evaluation

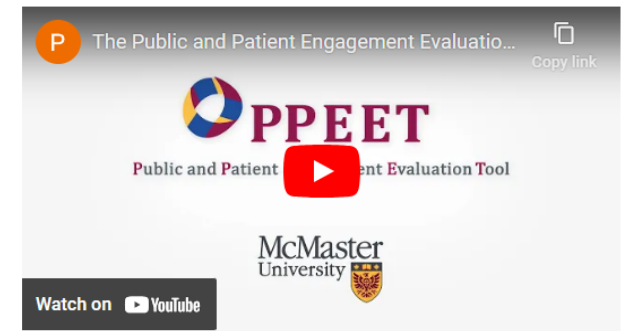
"The most important kind of assessment, from a UDL perspective, is formative assessment.

These kinds of assessments (check-ins, pause-and-think exercises, and other forms of reflection) play an essential role in guiding and redirecting learning toward the appropriate goal"



Public and Patient Engagement Evaluation Tool

The **Public and Patient Engagement Evaluation Tool (PPEET)** is a series of three questionnaires to evaluate public and patient engagement. The tool was developed primarily for use within health system organizations but has also been used to evaluate engagement within other contexts (e.g., health research).



Public Involvement in Research Impact Toolkit (PIRIT)



Where to start?



Plus One Approach

You do not have to try apply all principles at once
Add one more choice for learners to support
their learning/interaction

'Pinch Points'

Readability

Write accessible text

- Left align your text
- Use bold and italic sparingly
- Avoid all UPPERCASE and underlined text
- Ensure your colour combinations have sufficient contrast
- Do not convey information using colour alone

Avoid putting text into images

- If you absolutely must use an image of text, ensure the Alt Text exactly matches the text in the image.

Share a glossary of common terms contributors will come across

Addressing inequalities in clinical trials

The lack of diversity of participants in clinical research has long been recognised as a significant challenge. National Voices undertook a consultation among its members and Lived Experience Partners to identify key barriers to diverse participation in clinical and research trials, and potential ways to address these.





Slide Credit: PPI Ignite Network National Office

For more information, visit: www.ppinetwork.ie



Voices that matter: A live conversation



Tutorial Room 3, RCSI 123 St Stephen's Green



Thursday 17th October 2024



13:00 - 14:00



Let's talk about childhood cancer



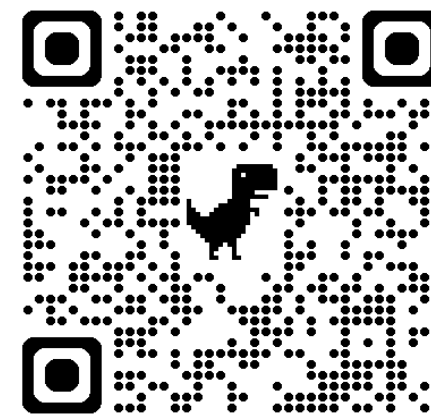
Muchnik Theatre, RCSI 26 York Street



Thursday 17th October 2024



15:00 - 17:00



PPI IGNITE
NETWORK



IRISH RESEARCH COUNCIL
An Chomhairle um Thaighde in Éirinn



RCSI

UNIVERSITY
OF MEDICINE
AND HEALTH
SCIENCES



PPI in the Park



St Stephen's Green, Dublin



Monday 21st October 2024



11:00am - 12:00pm



carrolpd@tcd.ie or niamhdillon@rcsi.ie



- Join PPI Ignite Network @ TCD and RCSI for a walk, talk & tea/coffee!
- Researchers, staff, students, PPI contributors & newcomers all welcome
- Pre-registration required – scan to sign-up!



References & Further Reading

The Centre for Excellence in Universal Design, established by the National Disability Authority in 2007.
<https://universaldesign.ie/> (contains useful guides on written and digital communication)

AHEAD (An independent non-profit organisation working with and for disabled people to shape inclusive and empowering environments in tertiary education and employment) <https://www.ahead.ie/udl>

CAST (2024). UDL Guidelines 3.0. Available in lots of different downloadable formats including multiple languages <https://udlguidelines.cast.org/more/downloads/>

CAST (2018). UDL and the learning brain. Wakefield, MA: Author. Retrieved from <http://www.cast.org/our-work/publications/2018/udl-learning-brain-neuroscience.html>

National Institute for Health and Care Research (NIHR) [A practical guide to being inclusive in public involvement in health research: Lessons learnt from the Reaching Out programme, April 2021.](#)

FOR EQUITY: Further resources for health equity sensitive research. <https://forequity.uk/general-resources/>
 FOR EQUITY was produced by a team at Lancaster University. It was funded by the NIHR School for Public Health Research (<https://sphr.nihr.ac.uk>) and the NIHR Applied Research Collaboration North West Coast (<https://arc-nwc.nihr.ac.uk>).

Habibzadeh F. Disparity in the selection of patients in clinical trials. Lancet. 2022 Mar 12;399(10329):1048. doi: 10.1016/S0140-6736(22)00176-3



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Thank you!

ppi@rcsi.ie

[@RCSI_PPI_Ignite](https://twitter.com/RCSI_PPI_Ignite)