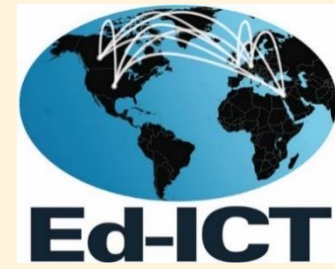# What models, approaches or frameworks exist in the field of disability, ICT and post-secondary education: are they successful in transforming the support and delivery of ICT for disabled students or do we need new ones?

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Aims

- Orientate readers to the main aims of the Leverhulme-funded International Network on ICT, disability, post-secondary education and employment (Ed-ICT)

- Provide an underpinning critical framework for the first symposium of this network in which we examine the value and efficacy of models, frameworks and approaches that exist in the field of ICT, disability and post-secondary education.

The Ed-ICT International Network

- To explore the role that ICTs play or could play in creating barriers and mitigating disadvantages that students with disabilities in post-secondary education (PSE) experience

- To examine how practices of educators and other stakeholders can craft successful and supportive relationships between learners with disabilities and ICT

  - **Synthesise and compare** the available research evidence across the five countries regarding the relationship between students with disabilities, ICTs and PSE

  - **Construct theoretical explanations** for why ICTs have not achieved the dramatic reductions in discrimination, disadvantage and exclusion hoped for

  - **Provide new perspectives about potential future solutions** regarding how PSE institutions can better use ICTs to remove the ongoing problems of disadvantage and exclusion of students with disabilities.

Underpinning critical framework for Seattle symposium

- PSE practitioners generally know that they need to develop inclusive and accessible resources and practices
- But they don't always know how to do this
- The field therefore has a tendency to look for 'tools' that help practitioners to do this
- One category of tool that the field turns to is: models or frameworks (and their associated approaches)
- Together models and frameworks are thought to have the potential to provide a supporting structure around which practice can be built.
- My argument: we need to critique whether these models, frameworks and associated approaches are tools that can actually make a useful contribution to the development of practice

COMPARING AND CONTRASTING THE RANGE OF MODELS AND FRAMEWORKS THAT EXIST

- **Most focus on accessibility**

- **Not always clear whether describing current practice or proscribing future practice?**

- **Different levels of focus**

Different levels of focus
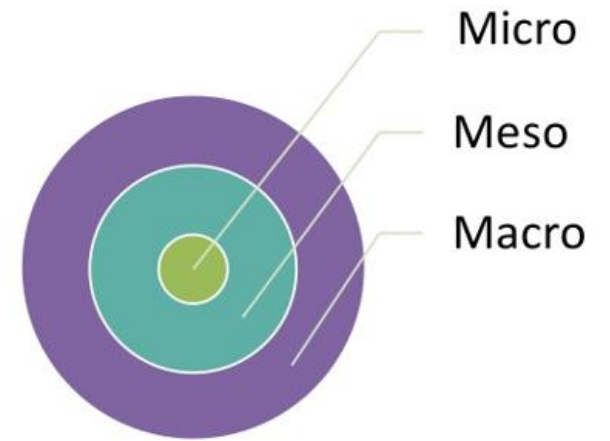
- *Micro level*: the practices involved in making
  learning all resources and activities (all teaching) accessible
- *Meso level:* the delivery of services within a post-secondary education institution that play a role in promoting the use of supportive ICTs that contribute to successful education and employment outcomes for disabled students
- *Macro level*: the institution in which those services (meso) and practices (micro) take place and the internal and external factors that influence or drive the institutions development and organisation of those services and practices

Some models and frameworks focus on just one level

- *Micro Level*: Universal Design for Learning/Instruction and the Holistic Model

- *Meso Level*: Composite Practice Model, The provisional staff development model and the Model of Accessibility Services Provision.

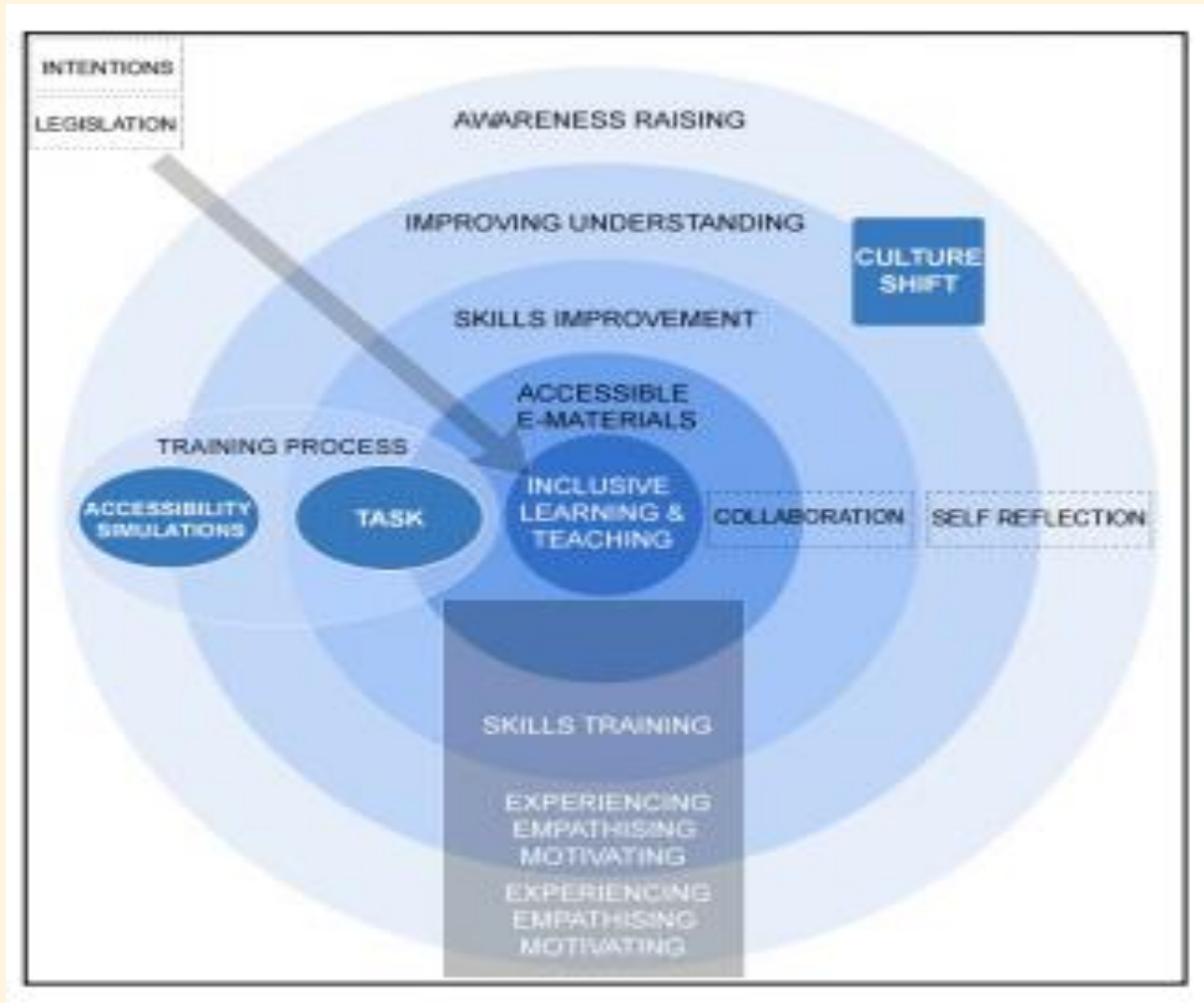- *Macro Level*: Model of Professionalism

Micro level example: The holistic model

- Developed and used to argue against the pursuit of universal solutions.
- argue for solutions that are tailored to take into account the individual's specific needs,
- later to refine their model to argue that a learner-centric model would place learning objectives at the centre.
- They also articulate in more detail the context in which this might take place by emphasising that solutions will need to take into account both online and offline learning activities and resources (blended learning).
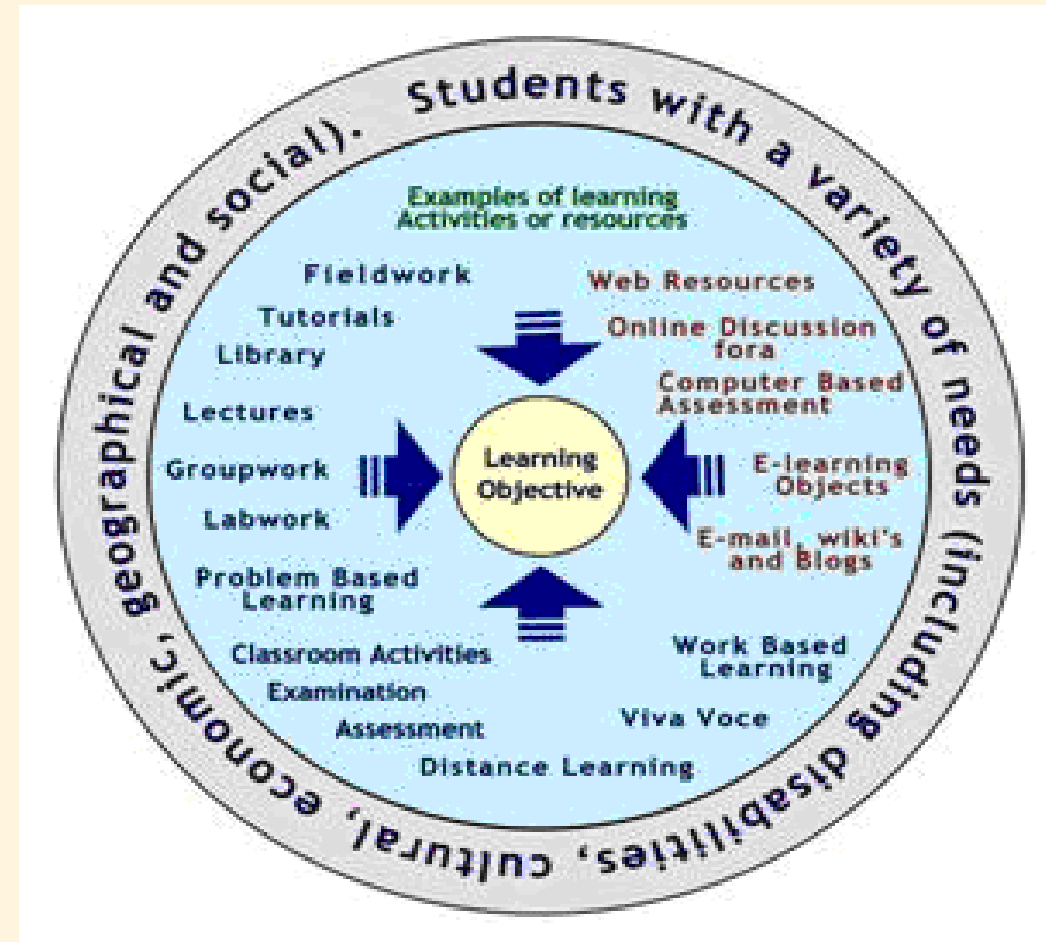
Meso level example: A staff development model for inclusive learning and teaching

- *framework components*: raising awareness; improving understanding and improving skills

- *processes* which are required in order to raise awareness, enhance understanding and improve skills

- a training *procedure* which through the adoption of the identified processes, function as a means to achieve the framework's components

- *culture change* within an institution will not occur without individual self-reflection and collaboration with others

Meso level example: The model of professionalism

- Organisations need to consider the policy and indeed philosophy of the organisation towards how it meets the challenge of accessibility
- Offers a way for an institution to benchmark itself against four tiers from initial intervention to professionalism

Intervention	Intervention/ institutionalisation	Institutionalisation/ professionalism	Professionalism
Low level of accessibility practice (T1)	Medium level of accessibility practice (T2)	Substantial level of accessibility practice (T3)	Outstanding level of accessibility practice (T4)
• **Responsibility and roles unclear, ambivalent** • **Low awareness by senior management** • **Low level of accessibility practice** • **Weak legal frameworks**	• Low awareness and responsibility of management, accessibility no priority • Considerable activity for students with disabilities by single persons • Existing practice not institutionalised • Ad hoc solutions to ad hoc problems • Weak legal frameworks	• Responsibility of senior management clear, accessibility a priority • Community of Practice with high level of institutionalised processes • Strong legal requirements	• Responsibility clear • High priority of accessibility • Institutional processes and stakeholder involvement • Development of policies • Evaluation of implementation • Legal framework strong driver

An example of the meso and the macro: The contextualised model

- Meso: Stakeholders and the services in which they operate
- Macro: the influences of drivers and mediators that are both internal and external to a PSE institution on stakeholder (and therefore service) practices
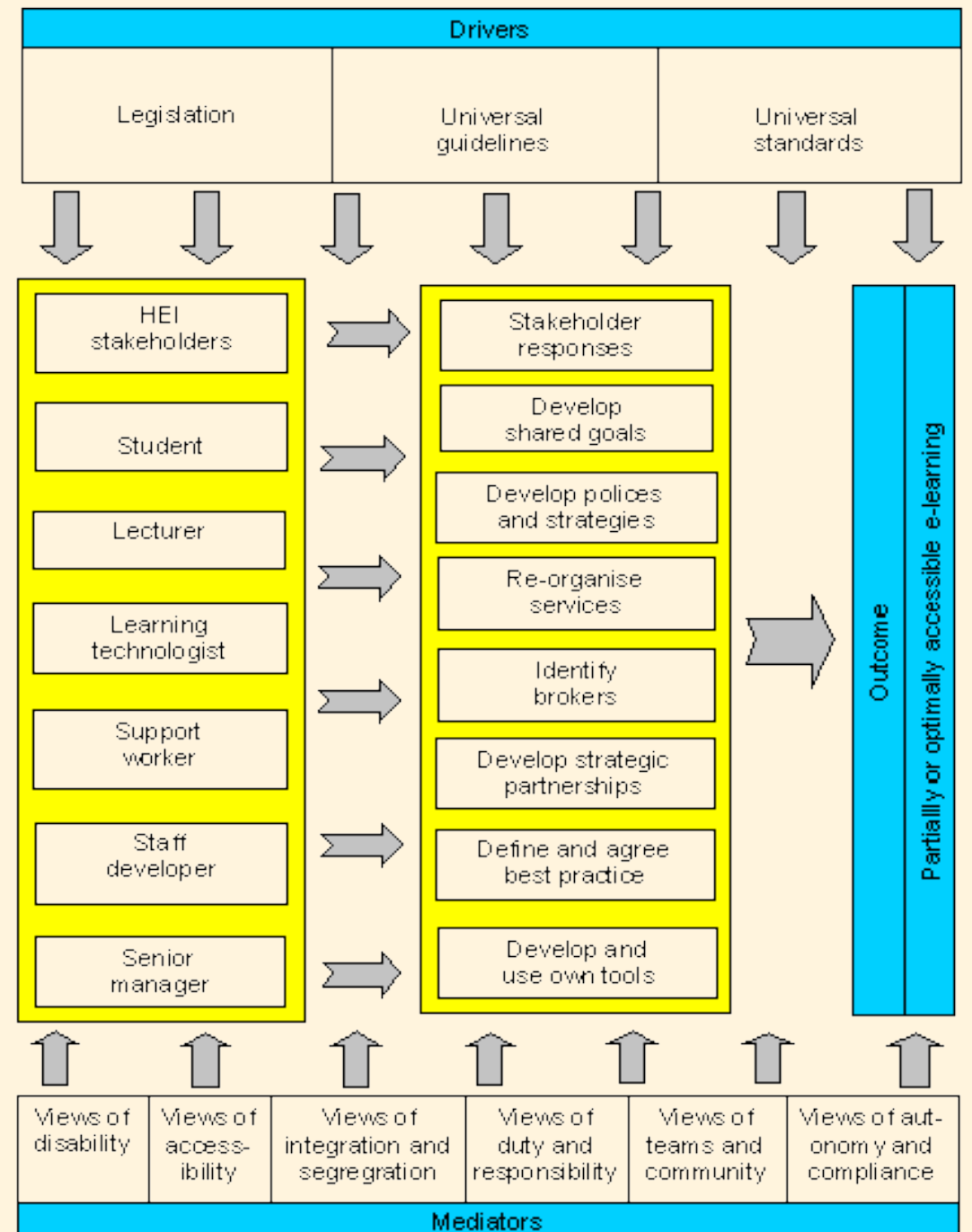
CAN MODELS AND FRAMEWORKS TRANSFORM PRACTICE?

How valid and efficacious are the models and frameworks?

Have we carefully examined the validity and efficacy of models or are we blindly following others?

Have we considered all the options?

How valid and efficacious are the models and frameworks?

- Validity
  - How were the models or frameworks derived?
  - What evidence is there that they have improved practice or outcomes for disabled students?
- Efficacy
  - How detailed are the models or frameworks- what is their level of granularity?
    - *Level 1:* Description of overarching principles, components and processes
    - *Level 2:* Examples given to illuminate the principles, components and processes
    - *Level 3:* Descriptions of the model or framework in action
    - *Level 4:* Detailed critical evaluation of strengths and weaknesses of model
  - Have the models and frameworks been implemented in practice? How widely have they been implemented?

Variability

Model	Validity		Efficacy	
	How were they derived	What evidence is there that they have improved practice or outcomes?	Level of granularity	Implemented in practice
Universal Design/Instruction	Literature Review Practice examples Professional Judgement	Some-but of varying quality	3	Yes- wide-scale
Composite Practice Model	Literature review Survey Practice examples	None	2	Unclear
Model of Accessibility Services Provision	Analysis of student requirements	None	1	Yes in one post-secondary institution
EU4ALL	Literature Review Large scale survey	A little	2	Piloted in two universities

More development and evaluation work is needed in order for a more convincing case to made for any or all of the models to have real and genuine potential to help develop practices that can, through the use of ICT successfully alleviate disadvantage and exclusion of students with disabilities.

Have we carefully examined the validity and efficacy of models

Critical silences:

- Criticising other models but failing to engage in anything other than a superficial way with the writings and work that underpin those models;
- Espousing the strengths of a chosen model but rarely discussing its weakness.

Universal Design as an example of a lack of careful examination

- How followers of Universal Design make much of the fact that Universal Design is underpinned by research

- How authors engage superficially with the Universal Design literature they are citing and in doing so make dubious claims.

- many of the originators of Universal Design have been much more cautious than their advocates in terms of the claims they make.

Have we considered all the options?

- Can one model or framework do the job?
  - Is there a need for one model that combines the micro, meso and macro.
  - is it possible to develop a model that can deal in detail with all three levels?

- Are we applying the right critical lens?
  - A disability lens
  - An inclusion lens
  - A geographic lens

Conclusion

- We need to question those things that are 'taken-for granted' as truth or fact in the field in order to re-imagine both our research and our practice.