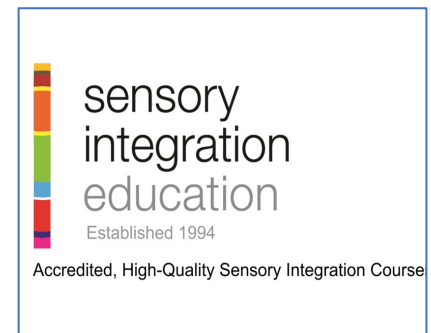


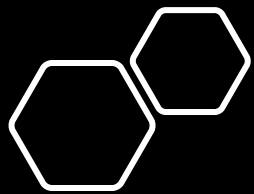
A Case Study from UK & Ireland:

Designing an E-learning University-accredited Postgraduate SI Clinical Training Programme for Occupational Therapists, Physiotherapists, and Speech and Language Therapists

Principles, Processes, Problems, Solutions, Results, and Future Developments

Rosalind Gray Rogers






So thrilled to
be here



Academic at Ulster University

Led a UK project into
Placement-based Standards
for SLTs

Chair of SIE Board
8 years



WHO
AM I?

Chair of Royal College
of Speech and Language
Therapists in UK

Led the development of a Northern Ireland-Ulster University
and eight Regional colleges- Counselling Training Provision –
clinical practice development with a new register of
Counselling Mentors/Supervisors

In 2015 Sensory Integration Network (UK & Ireland) had an ambitious plan!

Re-design and move the Sensory Integration Education-delivered inter-professional SI training provision to a fully e-learning Masters programme,

The first module ran online in May 2017 -the fourth and last module went 'live' in March 2020.



<https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcSvIWCCeE7f3qPD7VnKsEFQMgnWCOJDKlqaWLA&usqp=...>



sensory
integration
network



sensory
integration
education

Established 1994

Accredited, High-Quality Sensory Integration Cour

England, Scotland, Wales, Northern Ireland and Ireland

not-for-profit training organisation

Created by the merging of four communities of Occupational Therapists who were passionately committed to the client benefits of this therapeutic approach ASI[®], many of whom had either gone to California to work for a period alongside Jean Ayres, or who had been in communication with her about how to use the approach.

25 years old

From its inception, there was a commitment to assure that the standard of education was excellent and was available to not just Occupational Therapists (OTs), but to Physiotherapists and Speech and Language Therapists.

For a sense of these early days: <https://www.sensoryintegration.org.uk/SIE-Honorary-Fellowship-Award-DrGreg-Kelly/>

Strategic Aims 2019-2023

- ● The voice and the 'lived' experience of those with sensory processing and integration challenges are central to our educational and training provision

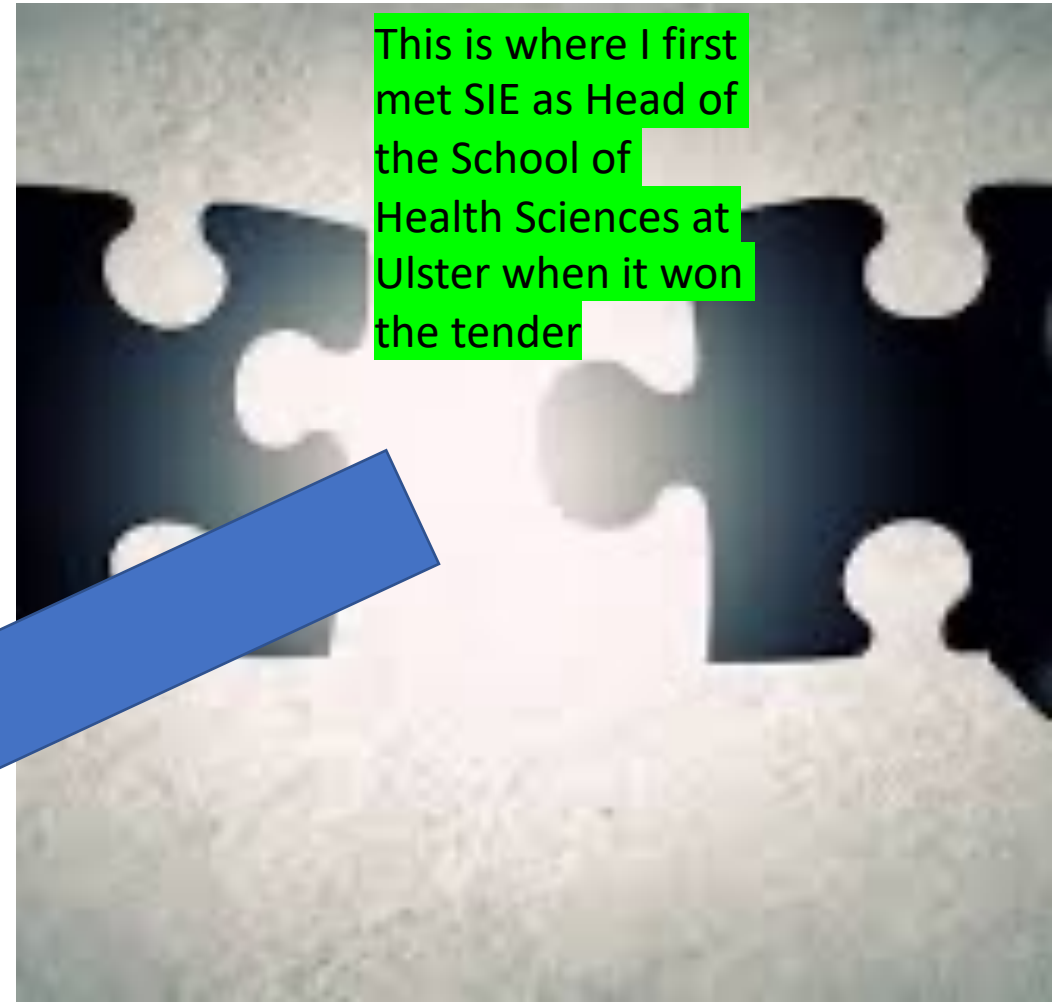
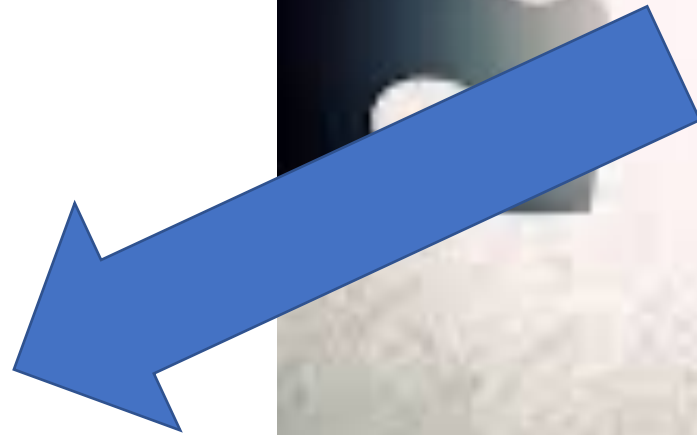
- ● Our inclusive community of practice is supportive, engaged and dynamic in its pursuit of excellence
- ● Our students learn flexibly through academically rigorous methods and innovative, clinically focused materials
 - ADD FLEXIBLE
 - ADD UNIVERSITY ACCREDITED
 - ADD RESEARCH DRIVEN
- ● Our organisation is the 'expert' and 'preferred partner' for innovative initiatives and collaborations in the health, social care, education and third sectors
- <https://www.sensoryintegration.org.uk/Aboutus>



Always partnered with a University

Since 2020
SHEFFIELD HALLAM
UNIVERSITY, ENGLAND

2010-2020
ULSTER UNIVERSITY,
NORTHERN IRELAND



This is where I first met SIE as Head of the School of Health Sciences at Ulster when it won the tender

Education Context

In the UK we specialise early –
Ireland has a broader school base

16 -18 years old A-levels 3 subjects

Health Courses -University
vocational; no choice of
Modules; 3 years

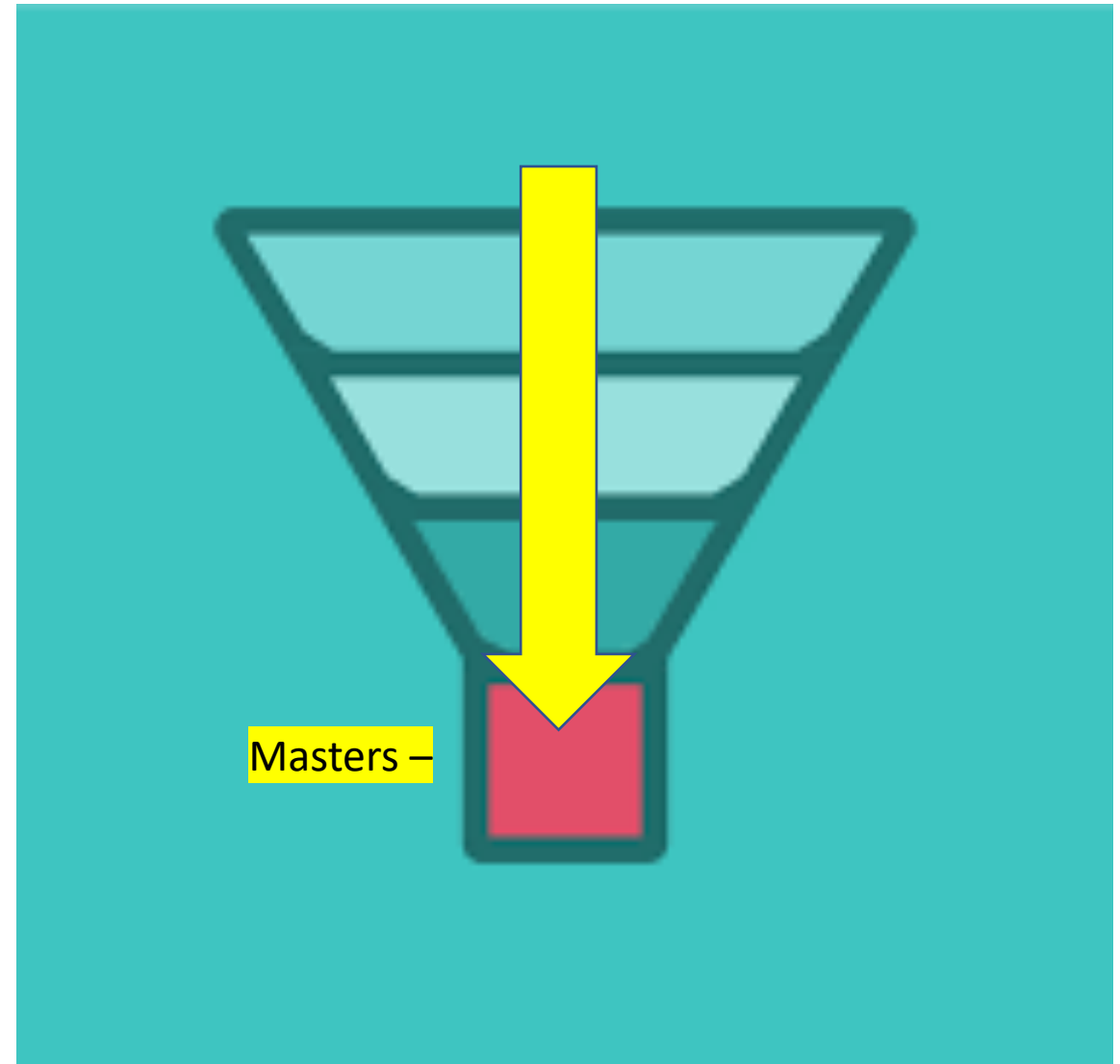
Bachelors Degree is the point of
professional health registration

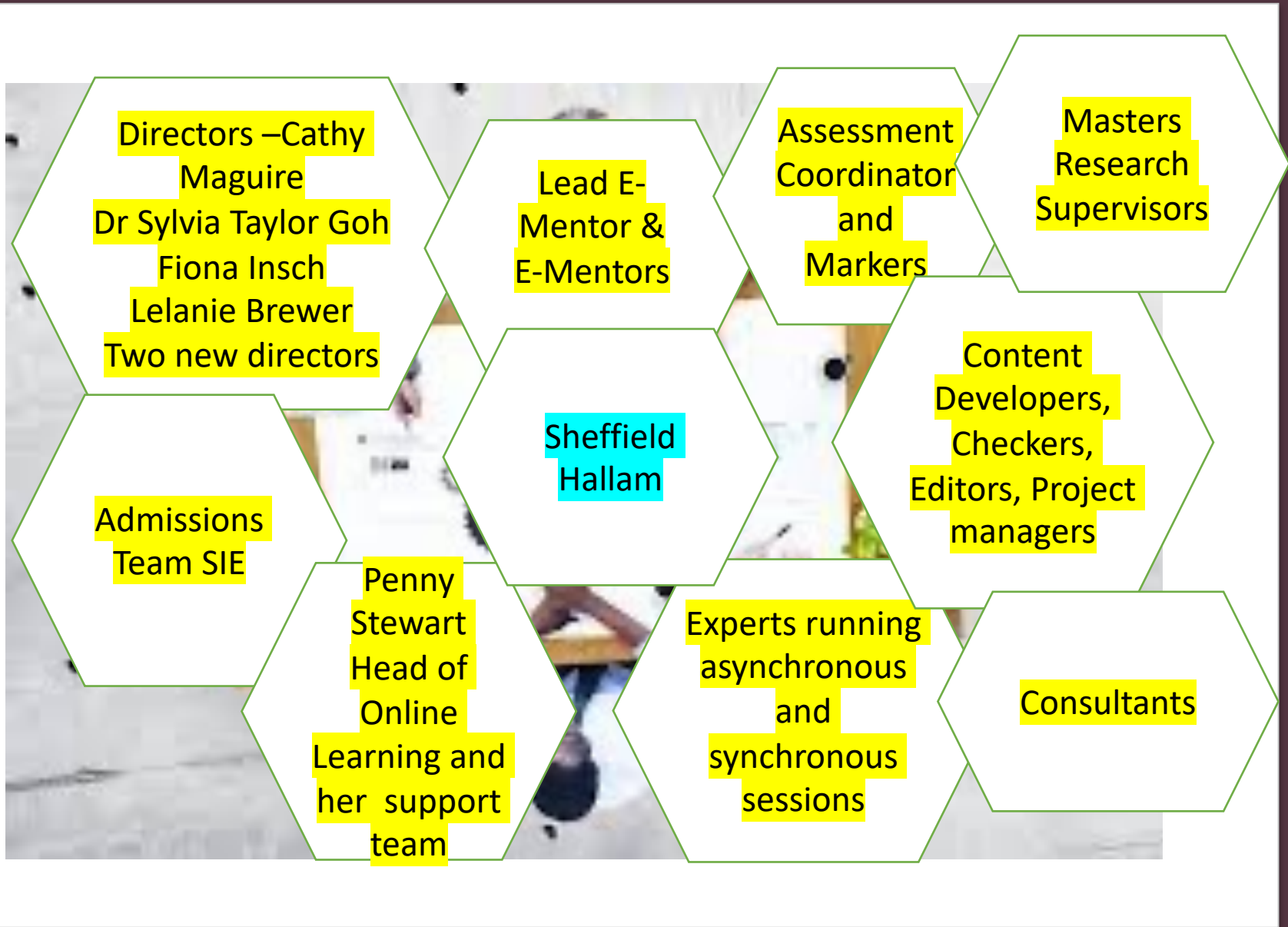
Post-registration Masters -180 credit points

60 credits –Postgraduate Certificate

60 credits - Postgraduate Diploma

60 credits -Masters





Whole team behind all the work I am presenting ..mistakes and views are my own

Structure

- Curriculum design, organisation, and content *historical; current; future*
- Student Learning *historical; current; future*
- Clinical Skill Development *historical; current; future*

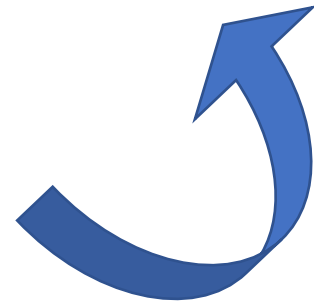


Curriculum design, organisation, and content
current; historical; future

Curriculum Design, Organisation and Content Principles

Our aim is to:

integrate work-based clinical learning with
explicit clinical reasoning



underpinned by SI knowledge and skills

Curriculum Organisation

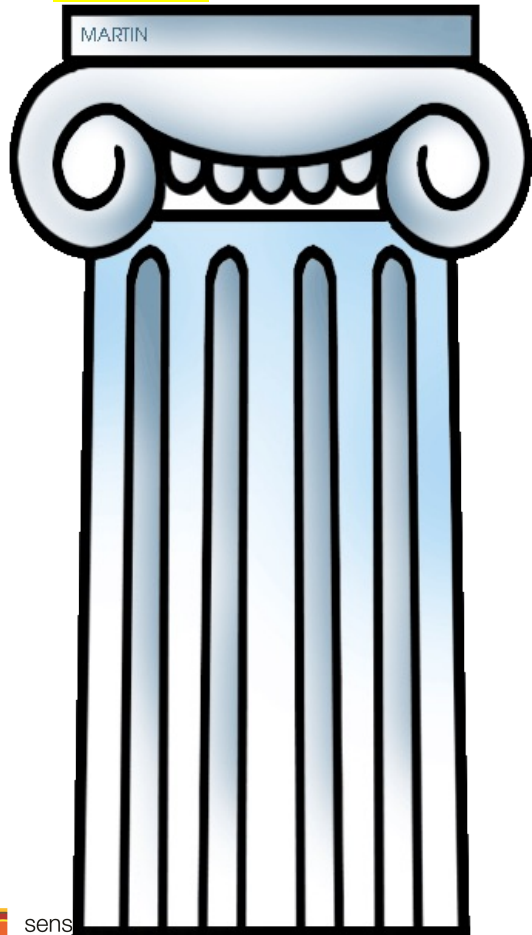
The curriculum is organised around the spiral curriculum design.

Students are introduced to knowledge, clients and conditions, which are then revisited with increased challenge in respect of complexity in assessment, diagnosis and intervention.



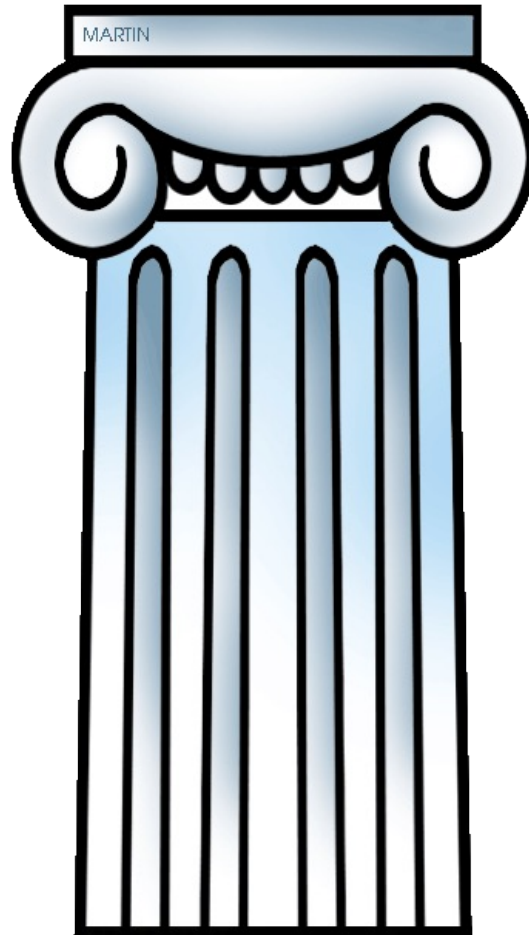
KEY CURRICULUM THEMES

Knowledge and application of SI theory and neuroscience to practice



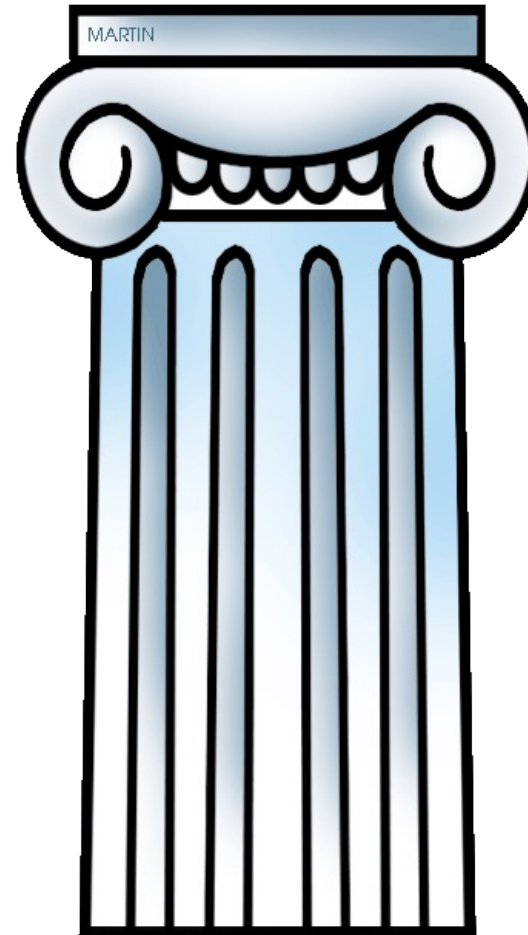
phillipmartin.com

Enhancing clinical reasoning skills



phillipmartin.com

Inquiry based learning



phillipmartin.com

So how did we design and organise the curriculum in practice?

Process of Course Design -between two positions

1. Zero based Curriculum review Paulsen & Peseau (1992)

Good example of how to do this is Borin, Metcalf and Tietje (2007)

2. Evolutionary (Gray-Rogers in prep.) –use existing structure and adapt it; Minimise existing weaknesses -add to, adapt, innovate

Example –development of the upper cortical tracts to manage the brainstem spinal tracts and activity
Development of the cortical areas in the Emotional brain network influencing the lower areas
Sapolsky, R

Paulsen, M. B., & Peseau, B. A. (1992). A practical guide to zero-based curriculum review. *Innovative Higher Education*, 16, 211-221.

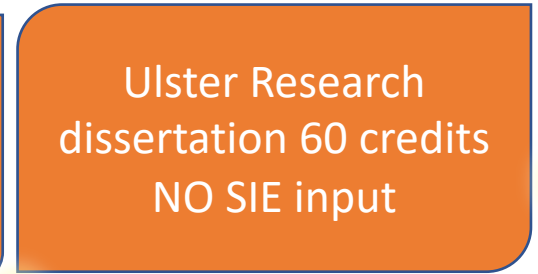
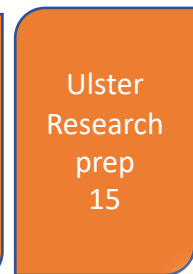
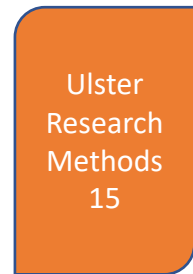
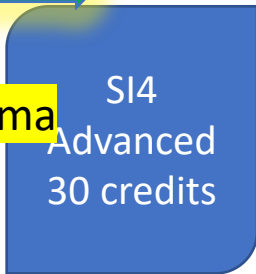
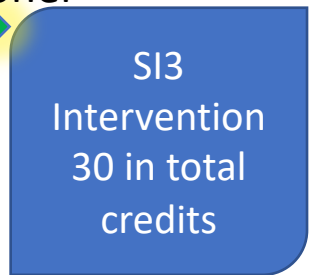
Borin, N., Metcalf, L., and Tietje, B. (2007). A Replicable, Zero-Based Model for Marketing Curriculum Innovation. *Journal of Marketing Education*, Vol. 29 No. 2, August 2007 164-174 DOI: 10.1177/0273475307302018

Research interpreter and research 'consumer' skills briefly brought into SI4 but were an add-on if you took the Ulster research modules

Advanced Practitioner

Practitioner status –before Intervention module
Advanced Practitioner –not partnered with PG Diploma

PG Certificate. & Practitioner



Postgrad Diploma

Masters

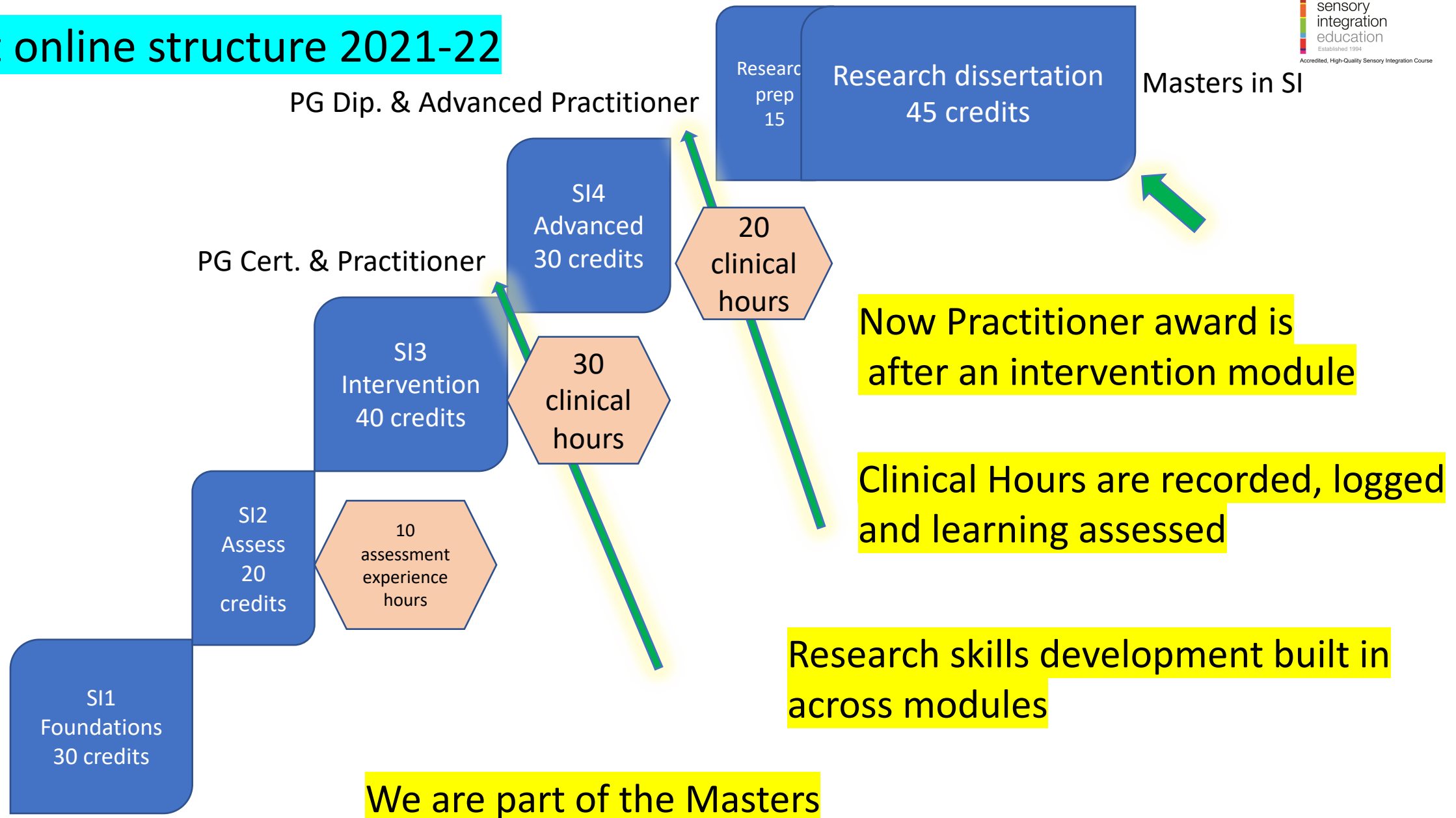
Had no designated recorded clinical hours

Had an SIE-assigned clinical mentor –so no scope for local work-based clinical mentor

SI2 and 3 were combined into two weeks face to face
Mainly around the administration and interpretation of the SIPT

Previous face to face structure

Current online structure 2021-22



Currently – **in my opinion** best course design so far

Students are progressing through the course in more numbers and we have a significant growth in Masters students

In the medium term future –I would like the Postgraduate Diploma as the target award

In the longer term, I would like the Masters as the target award

How did we design and organise the student learning methods around the content for online?

... how to teach it


.....how students are facilitated to learn

PROCESS OF CREATING ONLINE MODULES

So we started with Module 1 –Foundations of SI


- Set out a project specification
- Agreed an overall budget and budgetary control checks
- Recruited a team of content developers
- Recruited a project lead
- Generated a structure for the module –sections sub divided into units
- Captured learning outcomes by section and unit

How did we do?



We didn't make
this mistake

COMMON MISTAKE: to take the face to face content and student learning methods and convert it to online



We **DID** make
this mistake

MISTAKE: to assume that online content can be created by therapists – no matter how experienced and specialised

Developing learning content requires a professional educator

We planned a development period of one calendar year per module to develop it online

The first module took 21 months and many tens of thousands of British pounds

After the first content development stage which did not work,
WE ENGAGED PENNY STEWART
...every course developer needs a 'Penny'

HER BACKGROUND

OT –clinical background in mental health as a manager
and university experience as a lecturer and online learning
champion

Sympathetic to SI

Trained in South Africa -had pre registration SI knowledge



Rigorously challenging –as editor and converter to online she would not let any statement/content pass if it did not have objective evidence to support it.

Clinical 'nuggets' did not get used unless there was objective evidence to support them, or they were critiqued for evidence.

Opportunities for learning

Macro -We had/have too much dense neuroscience without opportunities to *apply it* throughout the module

We are currently refreshing the module to re-organise/reposition neuroscience underpinnings

We have an active in house conversation about **how much neuroscience, **to what level** and **where** and **when** and how the content should be **woven across** the modules and expected in the student assessed work.**

We look outwards for interactive neuroscience methods -i.e. attending IamBrain.org for their interactive methods Day 1

**For the remaining three modules,
our process became more streamlined**

Across the three modules, our **design starting point** was:

What do we want the successful student to **know, think, do, feel at
the end of the module post assessment submission and feedback?**

Contrasted with

What **content do they need to know and skills to learn?**

- Each module was different in its challenge
- Each module had different needs regarding content creation

In my view, SI3 was the most ambitious –
developing the clinical work-based learning workstream;
creating effective, efficient student assessments

Current Student Learning Strategy

Challenge: to create learning content and harness learning methods that would help students transform their thinking and their practices in a safe, effective, challenging, 'just right', flexible, adaptable manner.

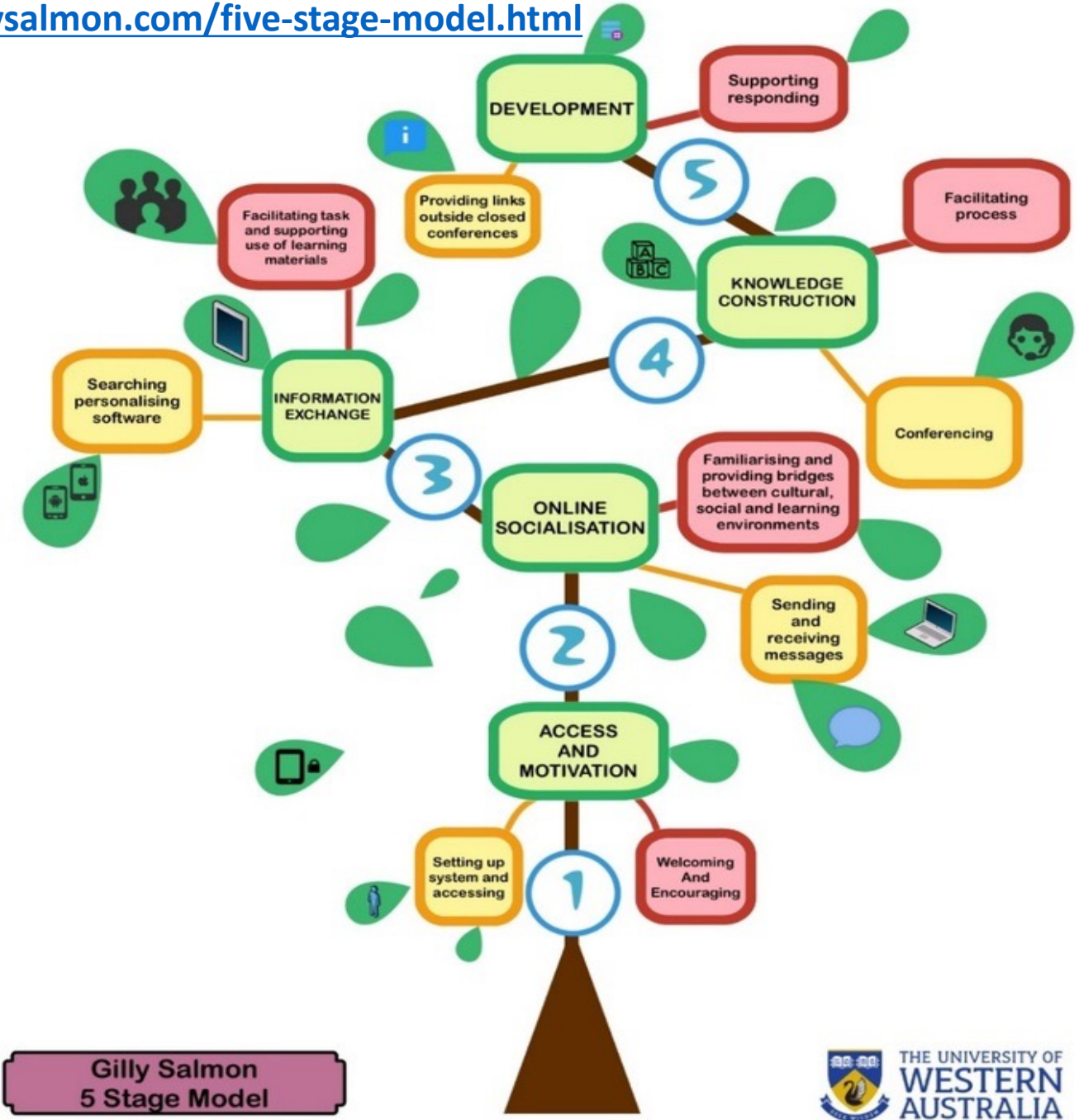
So need to make sure that we apply best practice principles for online learning

We sought expert advice within the HE sector.

We attended relevant conferences and events –and still do

Salmon's Five Stage model (Salmon, 2011) provided each module development team with a structured framework to scaffold the student's building up of comfort and skill, increase intrinsic motivation, and ultimate completion and success.

The five stages are built into each module



Gilly Salmon
5 Stage Model

Example:

Salmon Stage 1: Access and motivation

The welcome guidance includes clear details about what technology to use, including the best browser.

This advice has been developed from student feedback as to what would have helped to know earlier in the engagement process.

The use of short videos to walk through the steps to get online and onto the university's library and blackboard site are also there, using previous student feedback and FAQs.

'Storyboarding' the module

- The value of having an academic expert as Sensory Integration Education's Lead for Technology Enhanced Learning (Penny) ensures that the 'story-boarding' of each unit within the module, and the overall shape of the module, is coherent with Salmon's model and also the learning outcomes of the module's units and overall module learning outcomes.
- In addition, she also makes sure that the more innovative technologically-driven creative learning resource plans are tempered with the reality of what is best and easiest for the student to access.
- This realistic focus on the student guides decisions about the learning technologies used, such as the online platform, the access method for video teaching content, and associated online design of learning units.

Technologies for Communication

What are the most useful methods of student and Module e-Mentor communication?

Learners, rather than embracing a range of communication channels, can be overwhelmed by too many channels (Knox, 2014).

So, the channels used are closed to only the student cohort and are through the Sensory Integration Education-owned student forums.

- Each student within a module has a dedicated Module eMentor, who hosts an online forum for her Module e-Mentor group
- There is a coffee shop forum which is student-led
- Email is mainly used only by the administration of enrolment and university services
- Students can privately message their Module e-Mentor. Meetings can be set up through this route
- Social media, such as Sensory Integration Education's Facebook and Twitter accounts, are used as professional, open channels, and not related to students' progression through their module

Importance of E-tivities

This is the name given by Salmon (2013) for 'enabling active and participative online learning'.

As the modules progress from the more knowledge-heavy first module, these activities are critically important in allowing students to personalise their learning.

Main principles that drive the E-tivities and student assessment methods, overlaid by Salmon's framework:

- Ascertain and activate prior knowledge
- Build on existing knowledge and challenge misconceptions
- Use active learning techniques
- Encourage learners to think about how they learn and give learners responsibility for their learning
- Ensure learners get the experiences they need
- Reflection is helped by log-books, portfolios and feedback
- Build up mental models, practical skills and attitudes
- Allow learners to engage in hypothesis testing and action planning
- Respect learners and acknowledge who they are and where they are coming from

Week	Online Learning Unit	Self-Directed Activity	Learning Activity	Self-generated		Mapped to Stages of Salmon's Model Highlight the cell -if 2-3 highlight both etc.					Mapped to Curriculum Themes using key above for 1,2,3; If more than one, highlight cell for the dominant one, if appropriate			
		Description	Description	YES	NO	1	2	3	4	5	1	2	3	
0-1			Ementor & Student Introductions	x		1					1			3
1	Welcome & Orientation to Module, SIE & SH. Introduction to online learning.		Week 1 Tips & Tasks		x	1								
1	Ayres Sensory Integration® Theory & Practice Part One: a. Historical context b. Theoretical assumptions & model of sensory integration c. Research / evidence base		Any questions?	x			2				1			
1	Ayres Sensory Integration® Theory & Practice Part Two: a. Models explaining patterns of difficulty b. Modulation / discrimination / perception / praxis What is ASI Intervention?	SWOT analysis	Reflections & Questions	x			2				1			
2	Finding & Managing Literature skills	Library Treasure Hunt	Find, download & read a paper & work through critiquing literature worksheet. Share & discuss		x		2	3						3

Development of E-mentors

- Recruited Advanced Practitioners, many of whom have additional qualifications such as Masters, PhD study
- Developed a bespoke training package with a Specialist Online Education-trainer
- Cathy Maguire, Director, led on this development and initial bedding in as lead E-mentor
- Next phase: develop synchronous sessions; increase student participation –training needed under new Lead E-Mentor Moira Veira, mentored by Cathy Maguire

So we need to also think about how to develop clinical reasoning/critical thinking skills across the course

Facione and Facione 2008

ALWAYS NEED TO CRITICALLY REFLECT AND REVIEW

Time to think –avoid pressure to respond too quickly

**COMFORT IS NO
JUDGE OF
COMPETENCE
IN CRITICAL
REASONING!**

- Deliberate
- Reflective
- Analytical
- Procedural-INTERNAL SCRIPTS –EXTERNALLY DEVELOPED PROTOCOLS

Van Merriënboer and Sweller (2010)

Design Principles and Strategies in health professional education

AIM:

1. Decrease 'extraneous load'
-superfluous processes that do not contribute to the learning directly
2. Manage intrinsic load which is direct function of the task

Decrease extraneous load by using

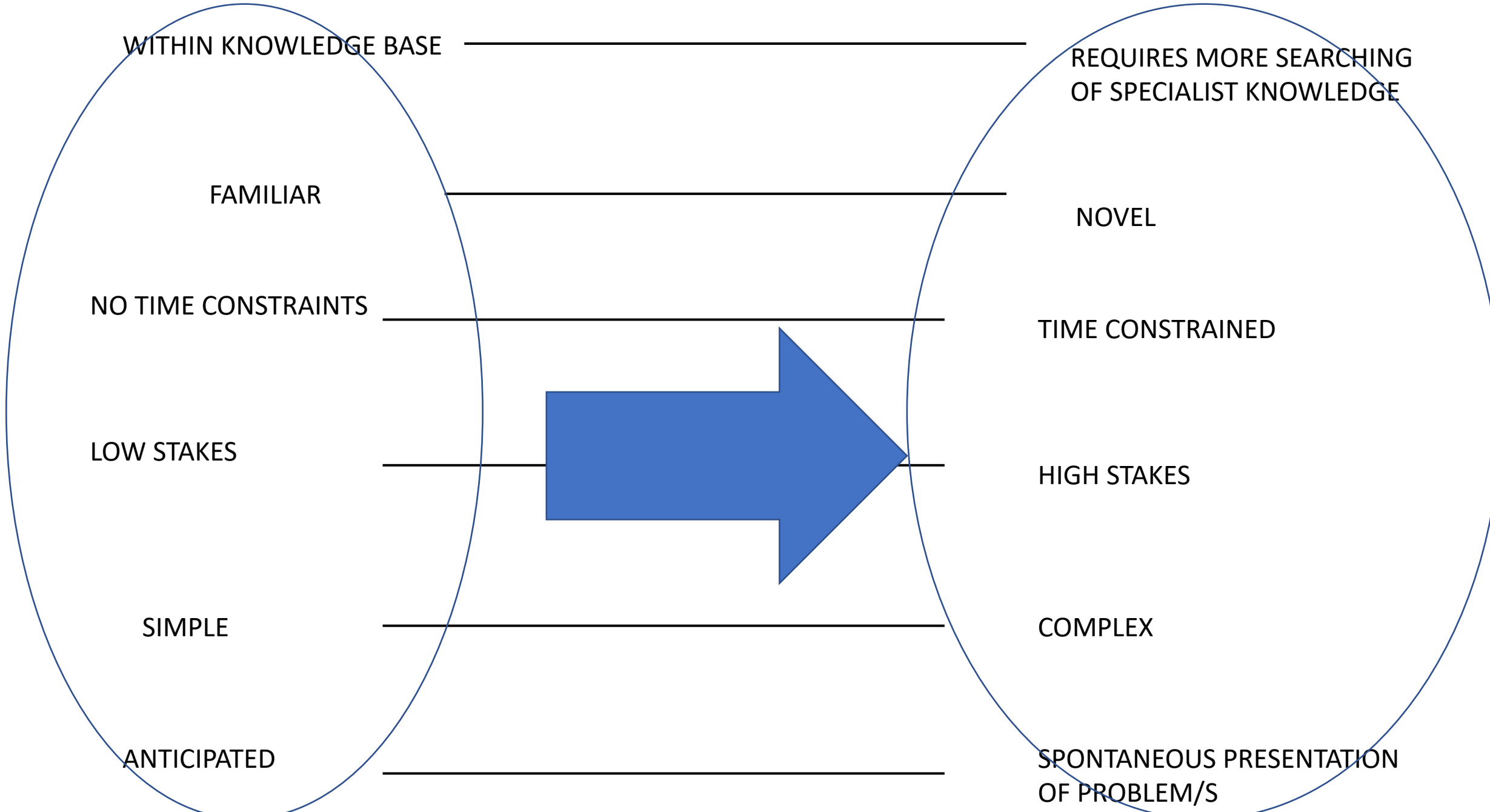
- 1. Goal free tasks**
- 2. Worked examples**
- 3. Completion tasks**
- 4. Integrate different sources of information**
- 5. Use multi modalities**
- 6. Reduce redundancy**

Intrinsic Load Management

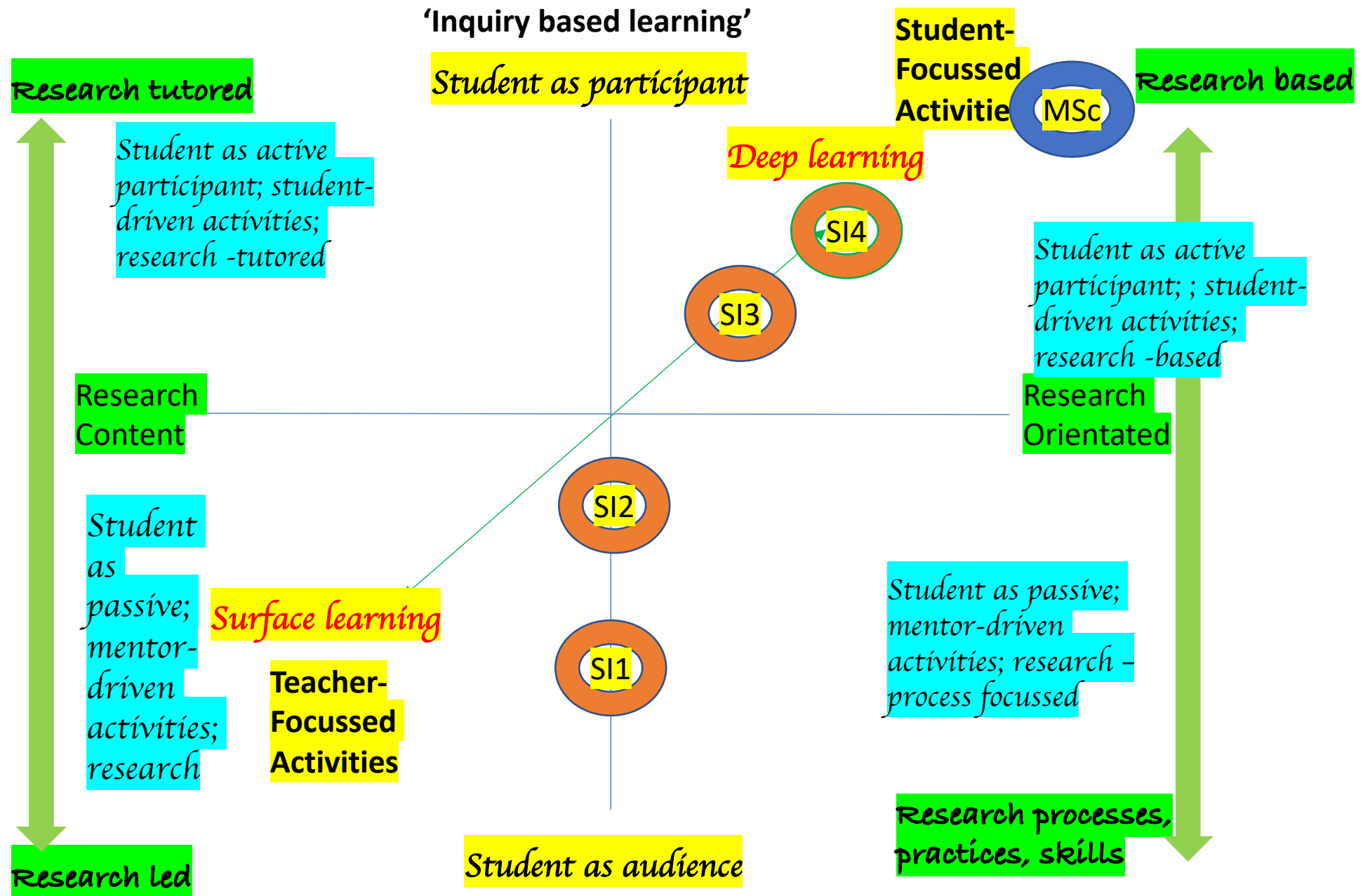
Simple to Complex ordering of learning tasks

Work from low to high fidelity

Increase variability; evoke self explanation



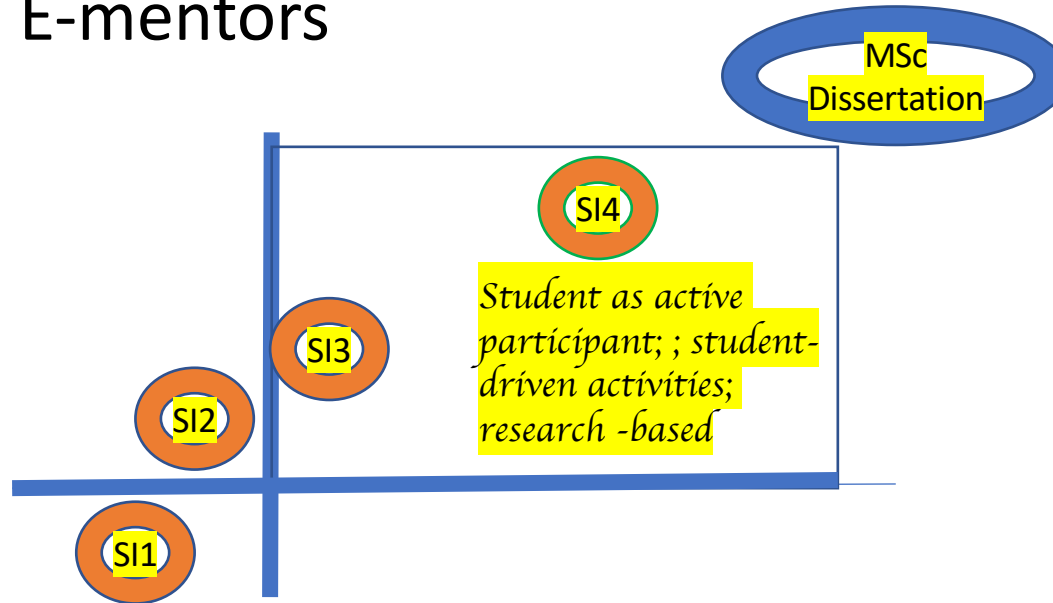
So we need to also think
about how to develop inquiry-
based learning across the
course



Dissertation Supervisor: Student relationship

E-tivities with E-mentors

Mentee-
Clinical
Mentors
Conversations



Library online resources

Self directed learning activities

Creative learning resources

Interaction with peers on coffee shop and E-mentor forums

Research –Masters work

Each student has 2 supervisors, one of whom is a specialist in SI

Each student is allocated 12 hours per supervisor which also includes dissertation marking

Optional research interest group evening zoom meetings approx. every 6 weeks with Sheffield Hallam tutor and Dr. Sylvia Taylor-Goh, SIE

Current working titles

- Experiences and attitudes of multidisciplinary therapists on using SI with adults with ID
- Educators knowledge of sensory processing in enabling children with ID to achieve
- Educators perceptions about barriers to learning for secondary children with ADHD
- Relationship between Looked After Children who had adverse childhood experiences and their results on the sensory profile
- Investigation of play and praxis in children who were premature
- Implementing ASI principles in community-based interventions
- The use of sensory modulation by Occupational Therapist's within the mental health population
-

Past titles

Talcer MC, Duffy O, Pedlow K. A Qualitative Exploration into the Sensory Experiences of Autistic Mothers. J Autism Dev Disord. 2021 Jul 12. doi: 10.1007/s10803-021-05188-1. Epub ahead of print. PMID: 34251566

McGill, C. and Breen, C. 2020 Can sensory integration have a role in multi-element behavioural intervention? An evaluation of factors associated with the management of challenging behaviour in community adult learning disability services. Journal of Learning Disabilities, ISSN: 1468-3156, Vol: 48, Issue: 2

Matson Rebecca The Experiences of Women with a Diagnosis of Borderline Personality Disorder (BPD) Using Sensory Modulation Approaches in an Inpatient Mental Health Rehabilitation Setting

Presented at Thessaloniki ISIC 2019

Clinical Skill Development *historical; current;*
future

Historical

- No clinical hours recorded
- Clinical experience with one case required for SI 4 assessment
- Had to have sessions with a SIE-appointed clinical mentor to help develop the case; no training for the clinical mentor-'time served'
- ICEASI Retreat agreed a minimum of 30 clinical hours working within an ASI framework in 2015

Myth –

We were going to develop practical clinical skills online

Clinical Practice is key –always was!

Developed Clinical Mentor quality assurance process –
led by Director, Lelanie Brewer



1. Clinical Mentor Guidance

Welcome and thank you for agreeing to be a clinical mentor for one of the modules of the SIE SI practitioner training pathway.



My name is Lelanie Brewer. I am the Director of Student Development for Sensory Integration Education and the academic lead for the SIE SI modular training pathway.

We value your expertise and experience in the field of Ayres Sensory Integration and look forward to working with you. For ease of communication and understanding during the COVID-19 pandemic we have condensed, updated and simplified the information we are sharing with you in this document and instead of providing a separate clinical mentoring handbook we are giving you access to the student handbooks to use for guidance instead. This will ensure that both you and your mentee(s) are working from the same information at all times and enable us to keep it updated efficiently and quickly.

1.1. 1. Why have Clinical hours and Clinical Mentoring been introduced to different stages of the SIE Pathway

Sensory Integration Education (SIE) has introduced an assessed clinical hours component into modules 2, 3 and 4 of the SI practitioner training-pathway to ensure students are as confident in the hands-on-work of assessing, planning and treating sensory integration (SI) difficulties as they are in the theoretical underpinnings of the client's neurophysiology. In the past, face-to-face skills were not assessed in the UK until SI Module 4: Advanced Practice and were historically both unspecified and unlogged. In the refreshed SIE SI Modular Pathway, students will begin gaining SI clinical experience earlier and in their own clinical setting. This approach, supported by clinical mentoring sessions at module 3 and 4 levels, will ensure that the skills students develop are relevant to the client group that they support and are of key value to them.

Below, is an overview of the clinical hours and clinical mentoring requirements for each module plus a brief outline of the different routes available for accruing these hours during the COVID-19 pandemic when direct, in person client working may be difficult to undertake for some students.

A surreal landscape with rolling, golden-brown hills under a bright blue sky filled with fluffy white clouds. A dark blue ladder is positioned vertically in the center of the frame, extending from the ground to the top of the image. The text "In the future" is written in a clean, white, sans-serif font across the middle of the image, partially overlapping the ladder and the sky.

In the future

We will be adapting to Health Education England's Guidance on Advancing Practice training, specifically around clinical/work-based learning and assessment

HEE 7 key principles

- Practice Context
- Competence and Capability
- Multiple Professional Registrations
- Individual Learning Plan
- Professional Development and Transition
- Integrated Approach
- Supervisor Development

Would we do it again...move online?

YES
Absolutely

