

The background of the slide is a collage of three images. On the left, a man with glasses and a woman are smiling. On the right, three graduates in gowns are holding bouquets. At the bottom, the lower legs and feet of several people are visible.

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## The role of Self Directed Learning in Medical Education

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# Aims for the workshop

- Explore the Self Directed Learning approach and how this can help support learning and development
- Consider contextual considerations for learners and educators
- Initiate potential ways in how to apply SDL in your curriculum

# Workshop

Interactive

Engaging

Useful

And.....Fun! (hopefully)





# The role of Self Directed Learning in Medical Education

- Learning never stops and is key to adapting to changing world
- Self Directed Learning approach can help support learning and development
- What do we mean by Self Directed Learning – the key components
- How to apply practice SDL as a methodology
- Undergraduate and Postgraduate examples from U.K.
- Contextual considerations



# Introduction

- The world feels pretty unstable just now: pandemics, climate, economies, societies
- To support our doctors of the future to be able to best respond and adapt to changes in their context we need high quality education
- As educators how can we support adaptation for our learners to help support them in a rapidly changing and evolving world?



# Learners in medical education

Healthcare focuses on being patient centred as part of its ongoing evolution and adaptation to our world

Education needs to continue with a learner centred approach to help stay relevant

Self directed learning approach can do just that

How can self directed learning can be built into medical education?

- Across the continuum
- Different approaches to curriculum planning



# What is self directed learning?

Humanistic approaches to learning

Malcolm Knowles (1975) - Andragogy

Adult learners lead their own learning – assessing learning needs, developing goals, accessing resources to reach these, reflective practice, self evaluation, continuous cycle

Overlap, interaction and similarities from different theories:

Self Regulated Learning (Zimmerman, 1990)

Experiential learning theories – Kolb's learning cycle

Self-directed change (Boyatzis, 1982)

Self-determined learning, double loop learning – Heutogogy

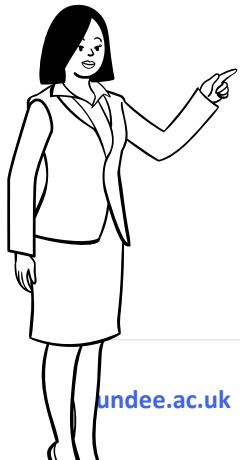


# How self directed are you?

Not at all



Completely





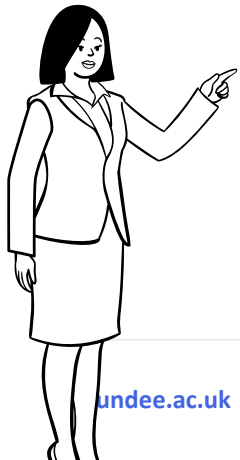


# How self directed are your 1<sup>st</sup> Year undergraduates?

Not at all



Completely





# How self directed are your final year students/interns?

Not at all



Completely



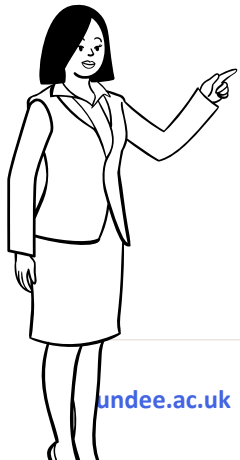


# How self directed are your post graduates?

Not at all



Completely



# Medical Education



How did you acquire the skills and knowledge to learn? What was the process and where/when did you learn it?



Did you use the same approach to learn at medical school? During specialty training? How has this developed over the years? In what way?



What about your learners? How self directed are they in their learning?



How has this evolved over the duration of their study? What factors are at play?

# My self-directed learning journey

- As an undergraduate
  - Learning to learn, learning how to study
- As a postgraduate
  - Learning to become a more independent learner
- 'Mature learner' medical education/academia
  - Well developed set of approaches
  - Range of resources
  - Engagement in community of practice
  - Continued scholarship throughout career
- Life long learner in all domains of life
  - Learning Scottish Fiddle for 9 years
  - Learning Brazilian JiuJitsu for 4 years

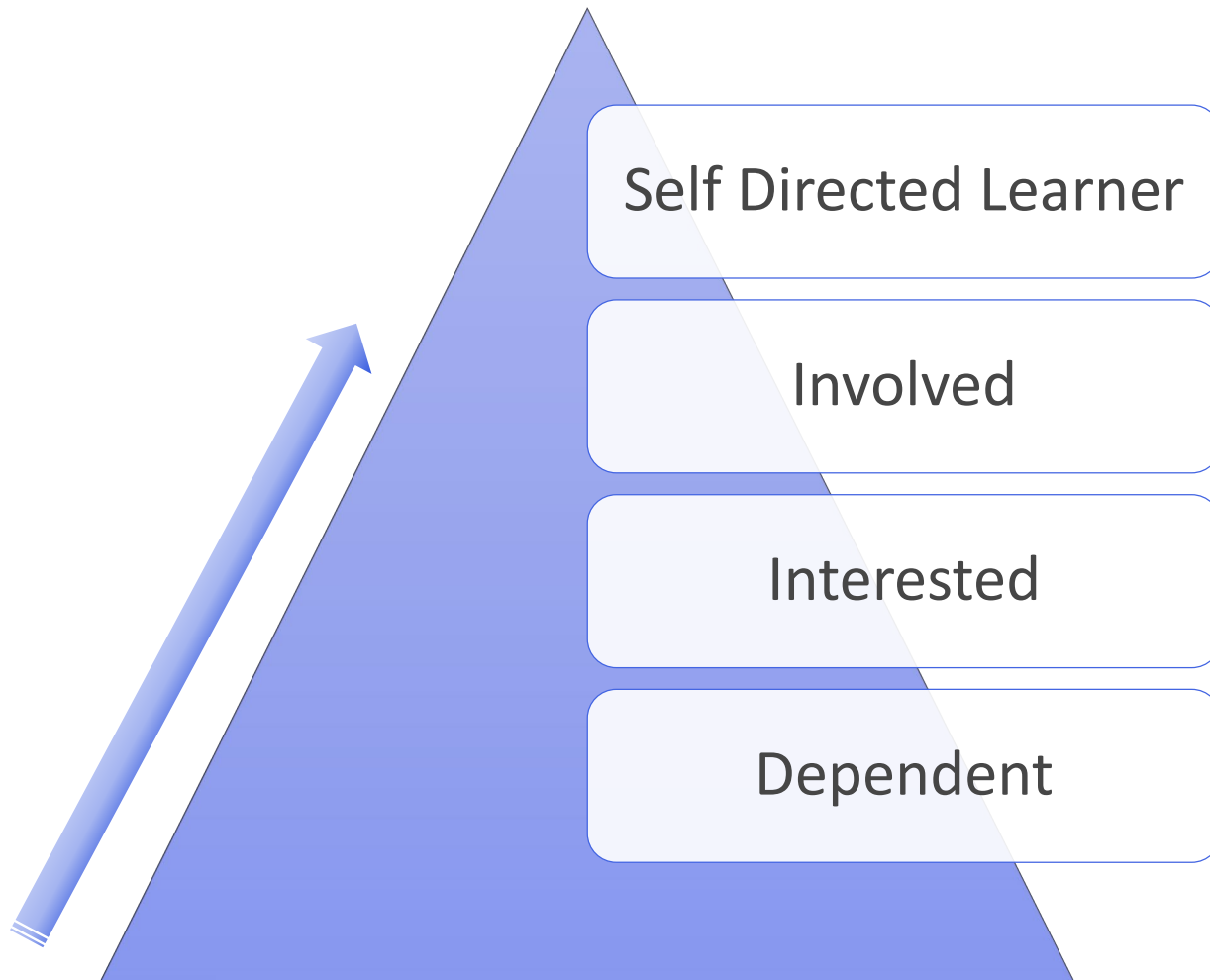


# My self-directed learning journey

- As an undergraduate (3<sup>rd</sup> year!)
  - Learning to learn, learning how to study
- As a postgraduate
  - Learning to become a more independent learner
- Centre for Medical Education
  - Flexible approach
  - Challenges -> opportunities
  - Continued scholarship
  - Developing / drawing on many CoPs
- Life-long learner in all domains of life
  - Rejoined a choir 21 months ago
  - In a ceilidh band for many years
  - Started an online gym during lockdown



# On becoming a self-directed learner





# Does SDL improve learning outcomes?

Systematic Review 59 studies (Murad et al, 2010)

Traditional approaches Vs SDL approaches

↑ Knowledge domains

↔ Skills and attitudes

Variability

Context is key

# Our role as medical educators

- SDL is not entirely unstructured, unsupported
- Faculty knowledge and skills required to support student development in SDL (Lim et al 2022)
  - building content knowledge;
  - emotional and motivational aspects of learning;
  - tap in to the social nature of learning;
  - metacognitive processes that promote SDL.
- Learner context – where they are coming from



# On becoming self directed – same for all learners?

- Phillips, Turnbull & He (2015)
- First year students lower in SDL readiness

## **BUT**

- Not dependent on mature age or previous higher education experience

What about other elements of the learning environment?

Curriculum designed to involve learners in choosing learning resources and strategies to learning





## Self directed learning in medical education

What might that look like?

Mapping to key frameworks to make sure key dimensions are covered (e.g. Outcomes for Graduates 2018 GMC; AoME).

Within that allowing learners to choose...

- Areas for (further) study

- Current/future contexts

Supported and guided by faculty to help develop SDL skills (Mifflin, Campbell, Price 2000)





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SSCs are self-directed opportunities for learners to undertake relevant work experience and are designed to give the learner the opportunity to explore areas of interest in more depth, and build their wider skillset.

At least one SSC during each year of study.

Topics include:

- in-depth study of clinical specialities (pathology, microbiology, biochemistry, public health.....)
- Sustainable healthcare, service learning
- creating learning aids including podcasts, wikis, and apps
- arts-based modules covering medicine in literature or the history of medicine
- Option of being self-proposed

## MBChB Student Selected Components (SSCs)





## MBChB Electives

During Level 5, learners have the opportunity to undertake an eight-week elective, which can be overseas - this is a period of clinical practice that learners organise and will create their own learning goals





# Continuum of medical education

Self directed learning and the skills to support it become more important as you progress through your medical career

How might SDL manifest in the postgraduate arena?



# MMEd Programme

## PG Cert/Dip levels

Each learner is invited to apply core reading to their own contexts and to use within their own learning contexts. Demonstrated through broad assessments (contextual)

## Masters level

Dissertation route – Learner chosen research project

Scholarship route – Personal Learning Goals



Link at end for more info on MMEd

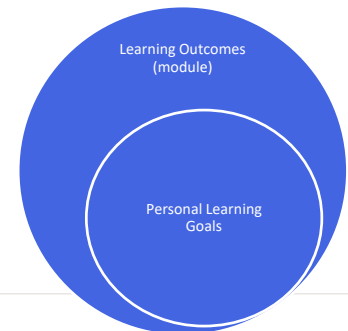


# Scholarship Route – Linking Theory to Practice

Engage explicitly with Self Directed Learning approach and its application to the learner and to their practice with their learners

## Aims

- Provide opportunities to develop and negotiate self-directed learning goals aligned to meeting students own needs and enable gathering of sufficient evidence to meet the requirements of this accredited module.
- Encourage reflection on self-directed mechanisms of learning for personal professional development and developing capacities for SDL in their students/ colleagues/ faculty.
- Provide an experience of portfolio building and skills of evidence gathering and reflection at masters level.





# Role as module leads and tutors

Total Duration just under a year

Weeks 1 to 4

- Learning about self directed learning
- Providing content (reading list, content, activities)
- Providing guidance, direction, feedback on goals (PLGs).

Weeks 5 onwards →

- More facilitative
- More peer led
- Coaching and encouraging use of innovative and new ideas relevant to Personal Learning Goals and students' educator role and interests.





# Personal Learning Goals

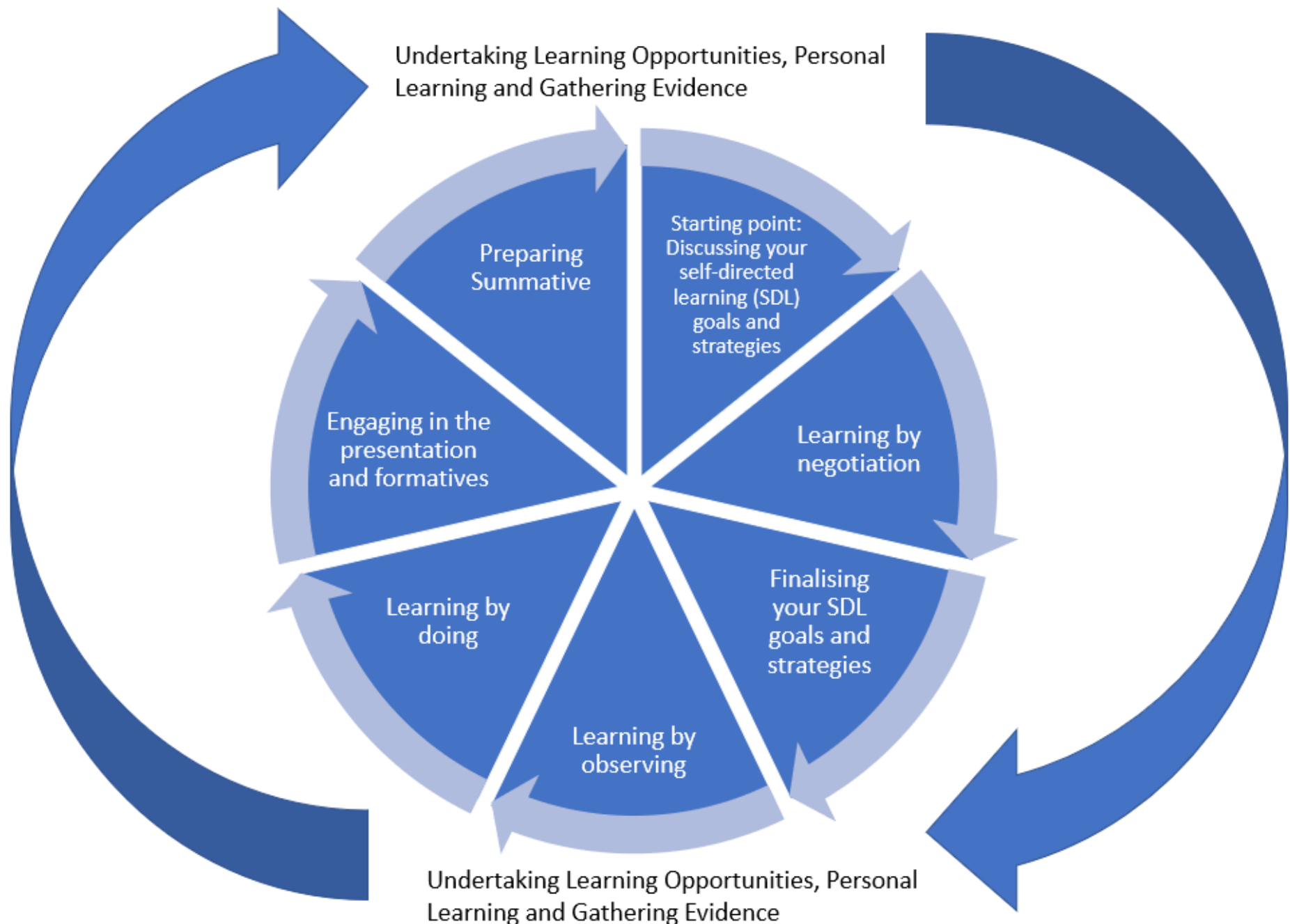
Supporting self directed learning by developing Personal Learning Goals in the first few weeks

- Formative
  - peer feedback
  - tutor feedback
  - module classrooms
  - revising

## Examples

*“By [the end of the module], I will implement one evidence-informed teaching practice to enhance learners’ psychological safety and elicit learner feedback regarding this practice”*

*“accurately identify, and demonstrate progression in the development of, the leadership skills needed to compassionately support and manage doctors experiencing ‘unusual measures’ such as a performance management programme”*





# What works in my workplace, does it work in others?

Can and should SDL be universally incorporated into medical education globally?


Western medical schools promote SDL opportunities e.g. PBL, TBL, SSCs– we want our students to identify as self directed learners. Does this hold everywhere?

Frambach et al ( 2012) looked at how culture might interact with developing self-directed learning approaches

- Uncertainty, tradition, hierarchy and achievement came up as cultural challenges to developing SDL skills in learners.

All students developed self directed learning skills – albeit at different rates.





## How can SDL be supported in your curriculum?

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- Discuss
  - Challenges
  - Opportunities
- Agree on a suitable area where the curriculum could be developed to include SDL
- Sketch out plan on what needs to happen



## Key References/Further Reading

Grow GO. Teaching Learners to Be Self-Directed. *Adult Education Quarterly*. 1991;41(3):125–49

Lim YS, Lyons VT, Willey JM. Supporting Self-Directed Learning: Development of a Faculty Evaluation Scale. *Teaching and Learning in Medicine*. 2022 34(5) 494-503

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