



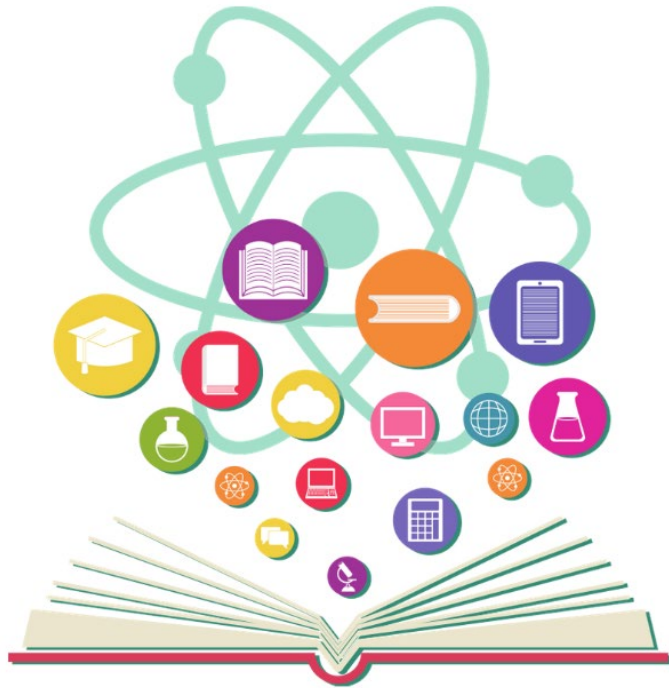
From Mundane to Magical

UNLEASHING
JOYFUL
LEARNING IN
YOUR
RESIDENCY
PROGRAM

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Joyful Learning



- Educational Approach:
 - Creates **positive, engaging & enjoyable** learning environment
 - Fosters **intrinsic motivation** and **creativity**
 - Facilitates **deeper understanding**
 - Designed to be **inclusive** and **accessible** to all learners
- Relies on a **rewarding** and **fulfilling** learning process

Joyful Learning: Magical Education

- Learning Environment
- Collaborative Community
- Teaching Strategies





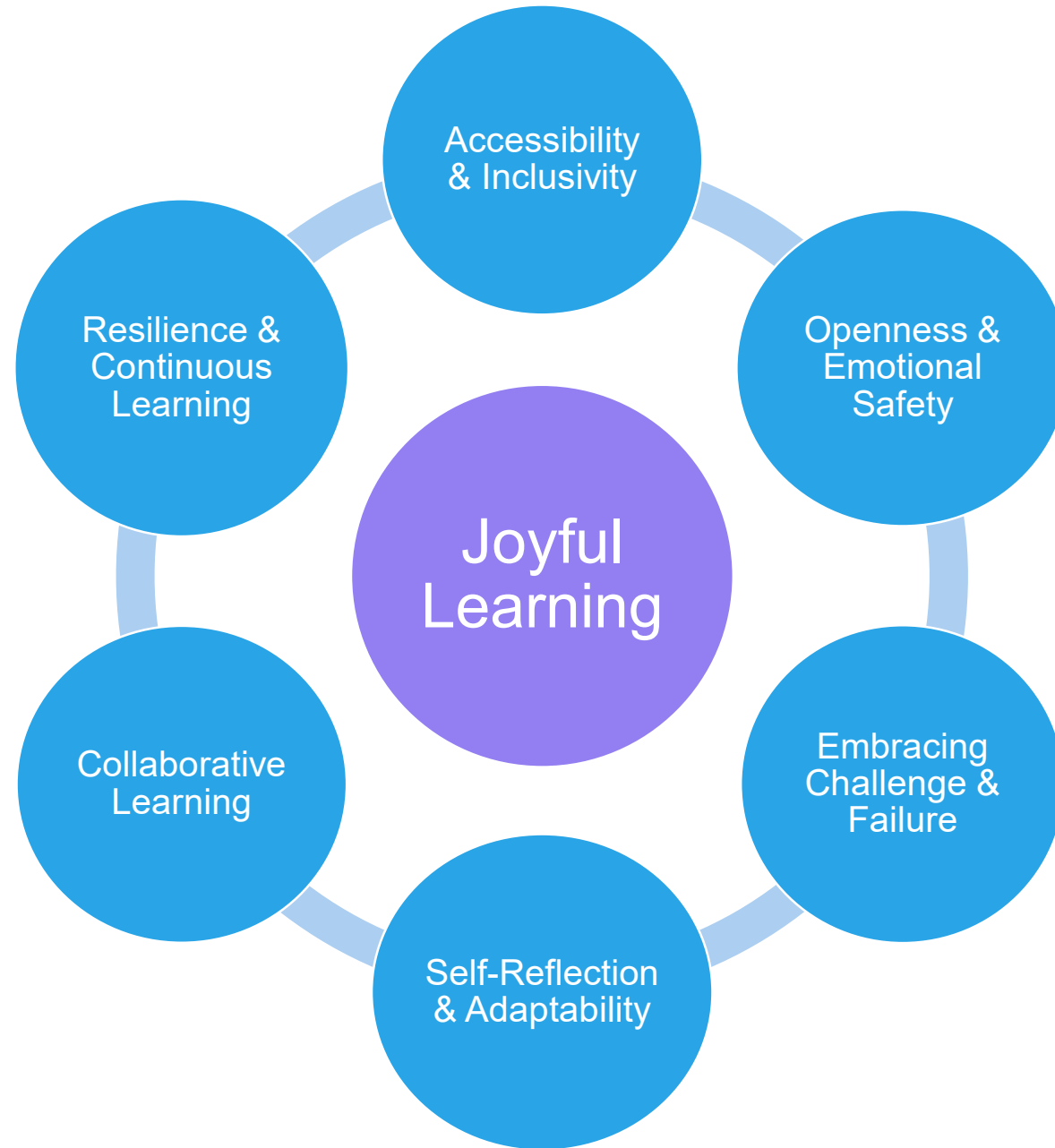
Joyful Learning:
Making Medical
Education Magical



Learning Objectives

- Define the three main "magical medical education" frameworks:
 - Universal design of learning (UDL),
 - Vulnerable Growth Mindset
 - Science of Learning
- Recognize how the three frameworks can be used to develop a joyful clinical learning environment, collaborative learning community & teaching strategies
- Develop practical strategies for implementing magical education principles into their own programs to foster joyful learning

Magical Medical Education Frameworks



Universal Design
of Learning



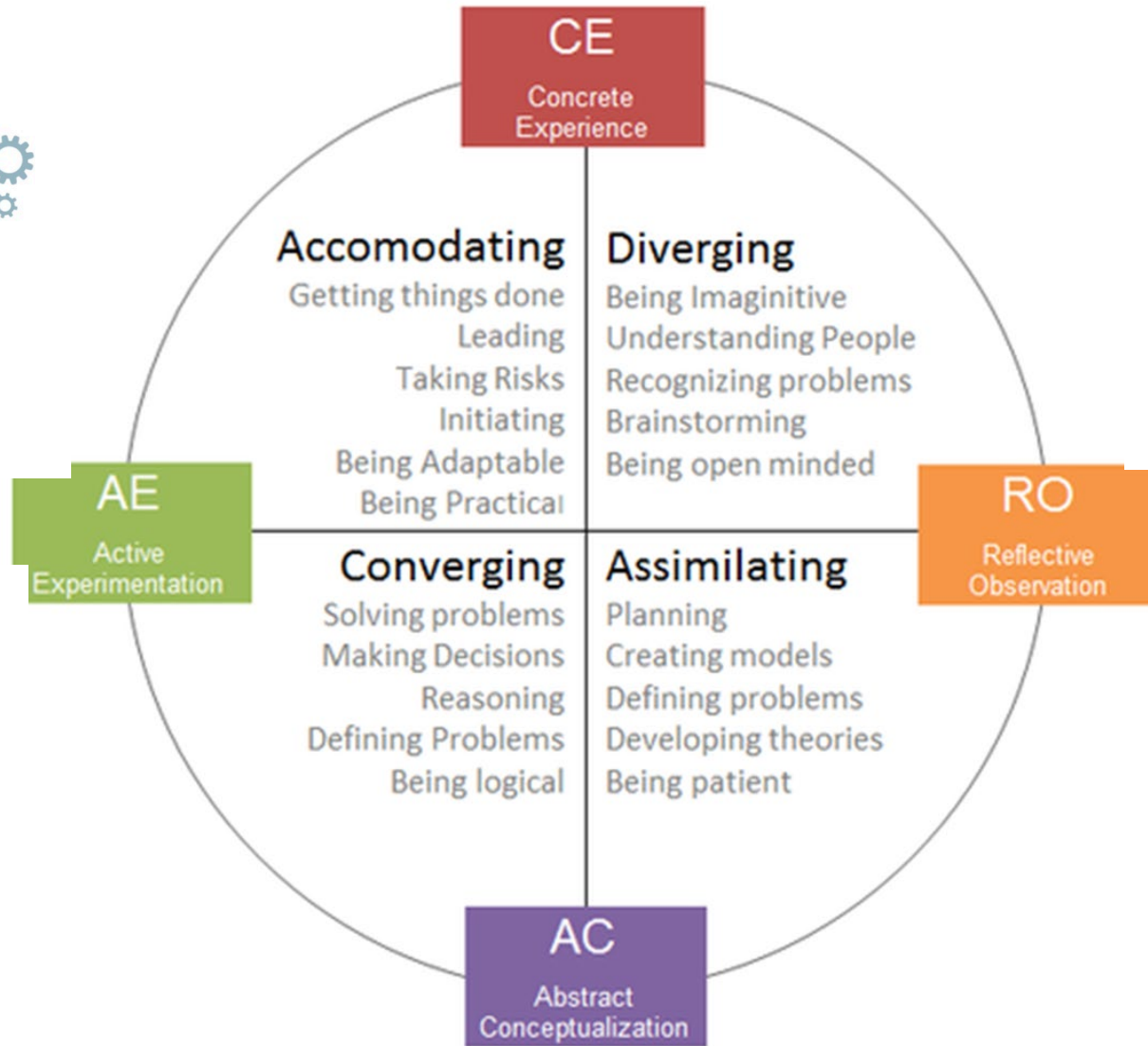
Vulnerability



Mindset



Designing for ALL learners



Universal Design of Learning

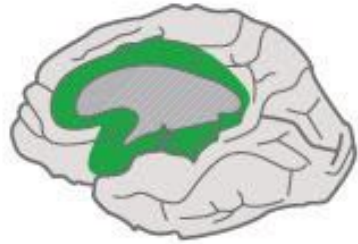


- Design curriculum that ALL learners can access
- Create flexibility and choice
- Remove barriers caused BY the curriculum



Universal Design for Learning

Affective networks: THE WHY OF LEARNING



How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions.



Stimulate interest and motivation for learning

Recognition networks: THE WHAT OF LEARNING

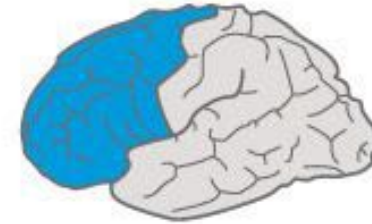


How we gather facts and categorize what we see, hear, and read. Identifying letters, words, or an author's style are recognition tasks.



Present information and content in different ways

Strategic networks: THE HOW OF LEARNING

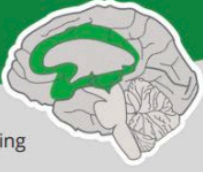


Planning and performing tasks. How we organize and express our ideas. Writing an essay or solving a math problem are strategic tasks.



Differentiate the ways that students can express what they know

Provide multiple means of Engagement



Affective Networks
The "WHY" of Learning

Provide options for Recruiting Interest

- Optimize individual choice and autonomy
- Optimize relevance, value, and authenticity
- Minimize threats and distractions

Provide options for Sustaining Effort & Persistence

- Heighten salience of goals and objectives
- Vary demands and resources to optimize challenge
- Foster collaboration and community
- Increase mastery-oriented feedback

Provide options for Self Regulation

- Promote expectations and beliefs that optimize motivation
- Facilitate personal coping skills and strategies
- Develop self-assessment and reflection

Expert learners who are...

Purposeful & Motivated

Engagement = The "Why"

- Provide varied ways to interact with content, educator & other learners
- Allow Learner-Directed Choice
- Engage learners as curriculum co-designers

Key Elements:

- **Student Motivation**
- **Community Building**
- **Diverse Opportunities**
- **Personal Relevance**
- **Emotional Investment**



Provide multiple means of Representation

Recognition Networks
The "WHAT" of Learning



Provide options for Perception

- Offer ways of customizing the display of information
- Offer alternatives for auditory information
- Offer alternatives for visual information

Provide options for Language & Symbols

- Clarify vocabulary and symbols
- Clarify syntax and structure
- Support decoding of text, mathematical notation, and symbols
- Promote understanding across languages
- Illustrate through multiple media

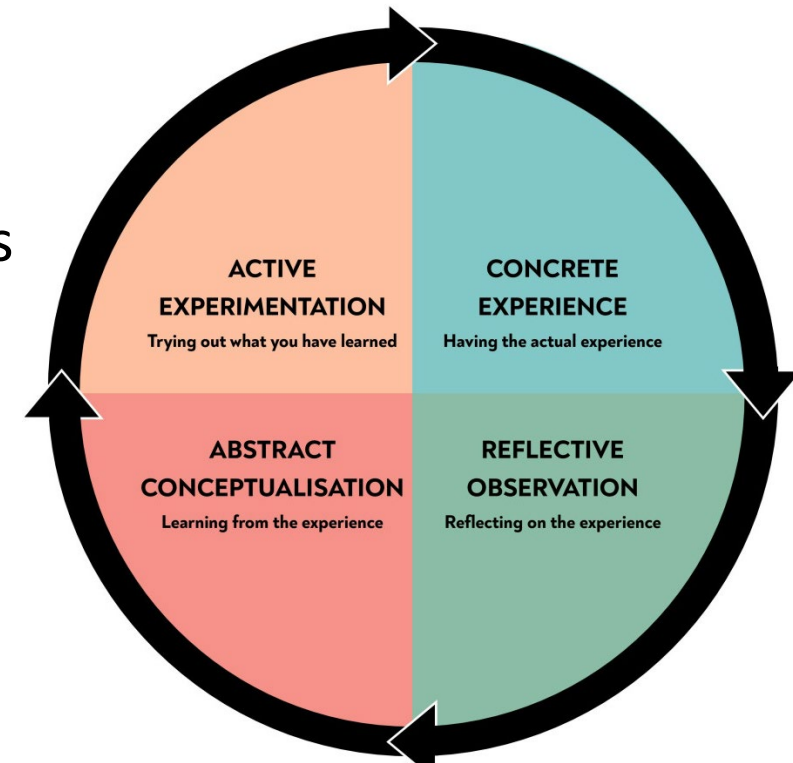
Provide options for Comprehension

- Activate or supply background knowledge
- Highlight patterns, critical features, big ideas, and relationships
- Guide information processing and visualization
- Maximize transfer and generalization

Resourceful & Knowledgeable

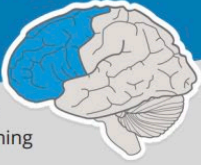
Representation = The “What”

- Present content in various formats
- Students choose preferred formats
- Consider:
 - Text Learning
 - Practical Demonstrations
 - Visual/Audio Aids
 - Real World Context
 - Peer Teaching



Provide multiple means of **Action & Expression**

Strategic Networks
The "HOW" of Learning



Provide options for **Physical Action**

- Vary the methods for response and navigation
- Optimize access to tools and assistive technologies

Provide options for **Expression & Communication**

- Use multiple media for communication
- Use multiple tools for construction and composition
- Build fluencies with graduated levels of support for practice and performance

Provide options for **Executive Functions**

- Guide appropriate goal-setting
- Support planning and strategy development
- Facilitate managing information and resources
- Enhance capacity for monitoring progress

Strategic & Goal-Directed

Action & Expression = The "How"

- Allow students to demonstrate understanding in various ways including on formal and informal assessments
- Offer different ways to participate in educational sessions
- Strategically use technology in teaching and learning
- Use multiple types of media to communicate
- Communicate learning objectives & goals and provide the organizing clues
- Consider timing and impact on learners



The Magic of UDL for Medical Education

Unleashes the Joy of Learning



Vulnerability

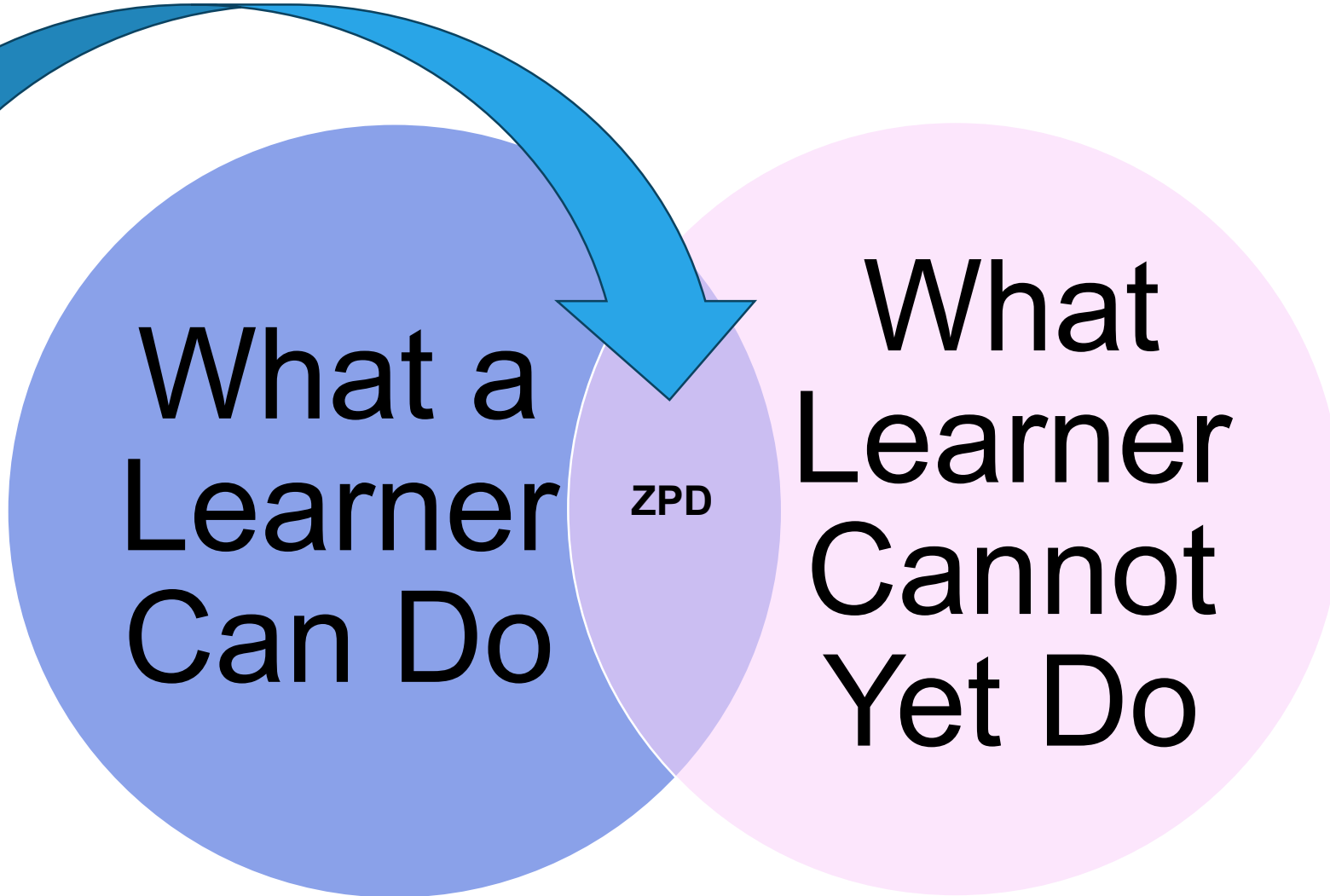
Uncertainty, Risk & Emotional Exposure



Vulnerability in Medical Education



Medical School
Residency
Fellowship



What a
Learner
Can Do

ZPD

What
Learner
Cannot
Yet Do

Zone of Proximal Development: The gap between what a learner can do independently and what they can do with support

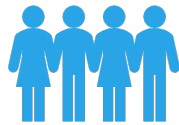
Rumble with Vulnerability



Having the courage to show up when you can't control the outcome.



Show Up
Unarmoured



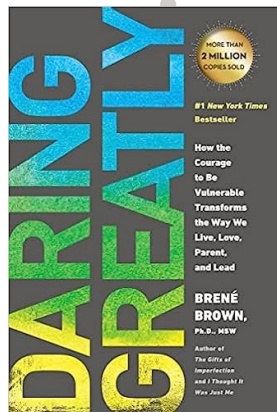
Live Your
Values



Bravely Trust



Learn to Rise



Show up Unarmored



Live Your Values



Bravely Trust



Mindset Theory: Learn to Rise



"Failure is an opportunity to grow"

GROWTH MINDSET

"I can learn to do anything I want"

"Challenges help me to grow"

"My effort and attitude determine my abilities"

"Feedback is constructive"

"I am inspired by the success of others"

"I like to try new things"

"Failure is the limit of my abilities"

FIXED MINDSET

"I'm either good at it or I'm not"

"My abilities are unchanging"

"I don't like to be challenged"

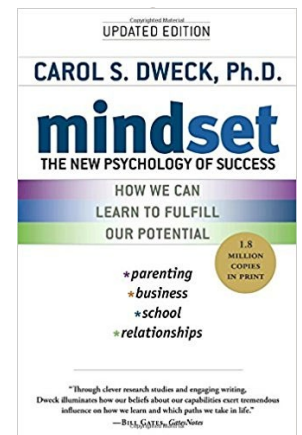
"I can either do it, or I can't"

"My potential is predetermined"

"When I'm frustrated, I give up"

"Feedback and criticism are personal"

"I stick to what I know"



Growth Mindset

- Fostered and modeled by faculty
- Mindset is a Choice
- Needs to be part of the school culture



It is our
CHOICES
that show what we
truly are
far more than our
ABILITIES.

- Albus Dumbledore



Rumble with Vulnerability

The Magic of Vulnerable Growth Mindset for Medical Education

Creates Connection & Collaborative Community





Let's Bring
the Magic to
Medical
Education





Building your Joyful Learning Environment

- ❖ Teach the magical frameworks
- ❖ Answer the “Why”
- ❖ Leave your armor at the door
- ❖ Engage your faculty in magical teaching
- ❖ Show up for your learners
- ❖ Create opportunities for connection



Creating Space to Rumble with Vulnerability

Building Community



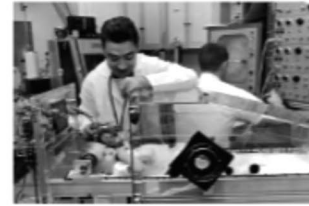


Fostering Community &
Collaboration

Professional Development + (X=Y) + Coaching = Community



Taking Flight Program



	Matthews Flight	Kennell Flight	Hack Flight	Horwitz Flight
Pilot	APD	PD	APD	APD
Co-Pilot	Chief A	Chief B	Chief C	Chief D
Coach	Coach Group A	Coach Group B	Coach Group C	Coach Group D
Advisor	5-6 Advisors	5-6 Advisors	5-6 Advisors	5-6 Advisors
*	Seniors	Seniors	Seniors	Seniors
*	Juniors	Juniors	Juniors	Juniors
*	Interns	Interns	Interns	Interns

RACE FOR THE RAINBOW



Wellness Groups & Neurogames



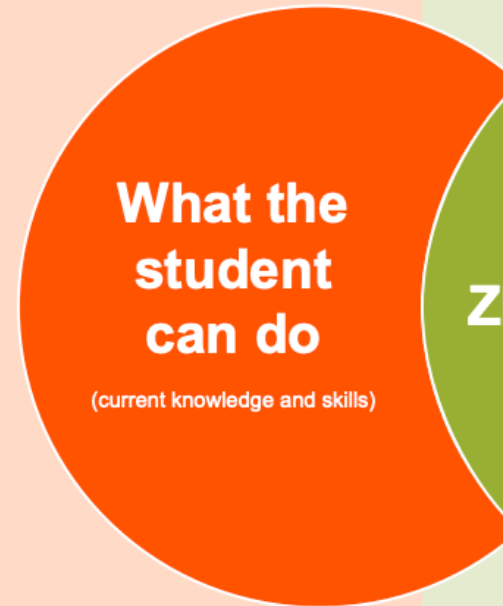
Teach in the Zone using the Science of Learning

Zone of Proximal Development

Lev Vygotsky



Stable
Lifeless
Comfortable
Bored
Unchallenged
Easy
Safe



Challenged
Willing to risk
Excited
Alive

Stressed
Anxious
Disinclined
Frustrated
Exhausted
Fearful

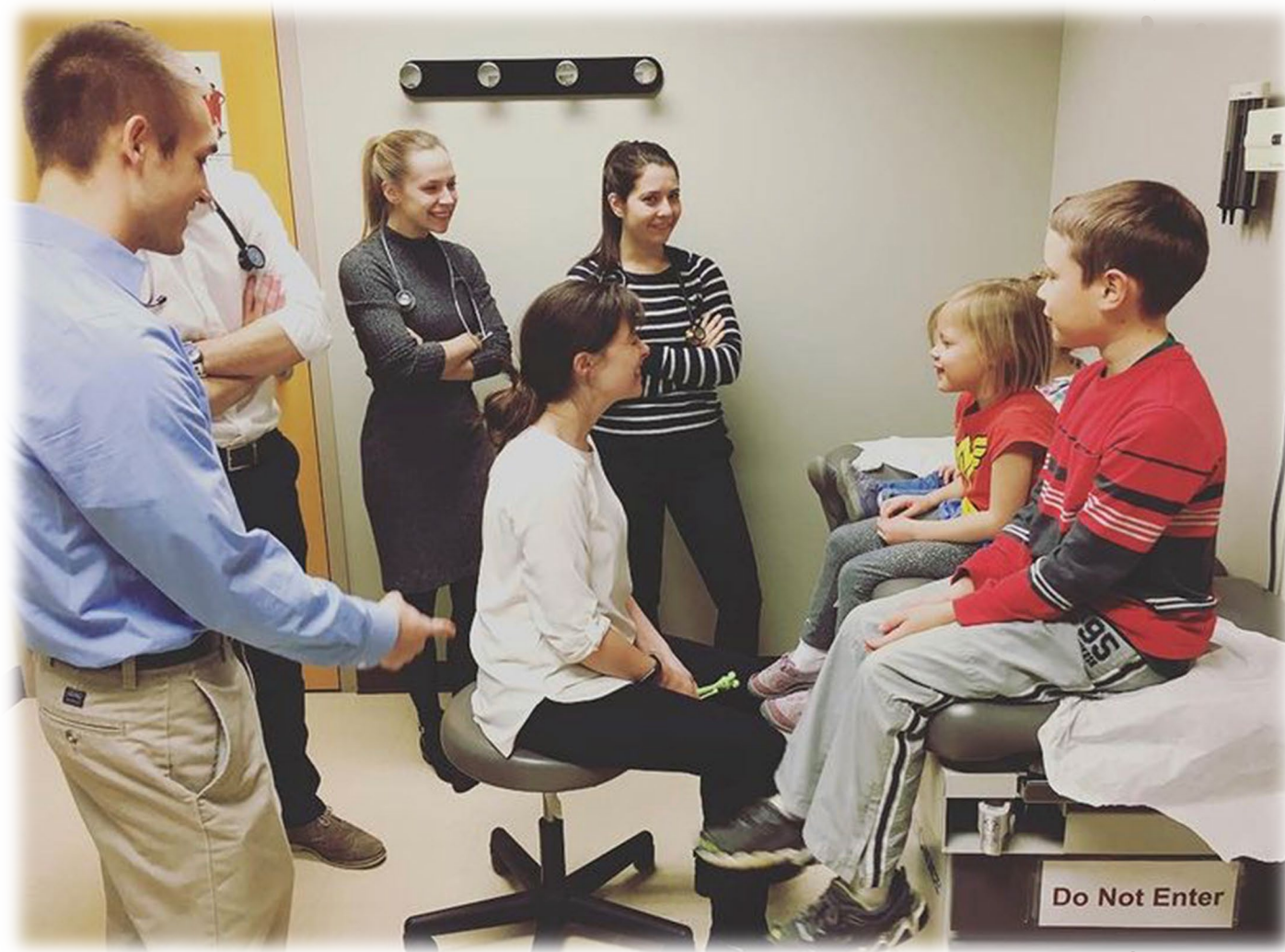
Learning / Development

ZPD is the gap between what the student is currently capable of doing independently, and what they can do with support.

THE POWER OF
YET



I can't do this...*yet.*
This doesn't work...*yet.*
I don't know...*yet.*
It doesn't make sense...*yet.*
I don't get it...*yet.*
I'm not good at this...*yet.*





6 Tips to Improve Learning

THE CURB
SIDERS
TEACH

Spaced Practice

1

Calling information to mind again several weeks after first learning improves retention.

Expand details around a concept. Why and how questions build understanding.

2

Elaboration

Concrete Examples

3

Solidify an abstract concept with varied examples.

Combine visual and verbal information. Be selective of what is included to make sure it adds value.

4

Dual Coding

Interleaving

5

Mixing together or alternating similar concepts can help compare/contrast.

Quizzes, questions, or talking about a topic brings it back to mind, solidifying the knowledge.

5

Retrieval Practice

Magical Medical
Education
Frameworks
+
The Science of
Learning
=
Joyful Teaching

The Neuro-Games

WELCOME TO THE NEURO-GAMES

- Optional Add-On Education to Friday School
- Solidify your knowledge with puzzles, games and questions
- Work as a team to earn extra points & prizes!
- Comes to your inbox every Friday!



- No Prep Journal Clubs
- Peer Teaching
- A Day in the Clinic
- Gamify
- Professional Development
- Kahoot!
- Jigsaw Method

Reimagine Noon Conference



Daily Dose of Development

Spaced Practice + Retrieval Practice + Interleaving
= Sticky Learning

PocketMedEd Home Curriculums

Curriculums > My Curriculum

CURRICULUMS

Daily Dose of Development

Normal child development is fundamental to many areas of medicine, especial pediatrics and related subspecialties. Daily Dose of Development's core program is designed to help you master the fundamental concepts, milestones of normal child development and test that knowledge in the clinical setting.

Active Programs

Curriculum Objectives:


Provide a longitudinal curriculum exploring normal childhood development, promoting mastery of fundamental knowledge over time

Provide daily delivery of content presented in an interactive quiz format with accompanying micro-lesson to allow mastery of fundamental material on an app platform.

1.0 Introduction to Child Development 0% Average Score View Program 0 of 15 Quizzes	3.0 Fine Motor Development Start Program (11 Quizzes)	5.0 Verbal Language Development Start Program (0 Quizzes)
4.0 Social Language Development Start Program	6.0 Child Development Theories & Key Concepts Start Program	8.0 Concept Integration & Post-Test Start Program

Back Daily Dose Quizzes

The children in this picture are both working hard on their art creations. Based on their grasps of their pencils, how old are the children in this picture?




a) 12 months, 3 years

b) 18 months, 3 years

c) 24 months, 4 years

24 Daily Quiz More Admin



What did we learn today?

We learned about:

- The 3 Magical Medical Education Frameworks
 - Universal Design For Learning
 - Vulnerable Growth Mindset
 - Science of Learning
- How using the magical frameworks can build a joyful learning environment in magical and medical education
- Practical examples and strategies of how to bring the magic to your program

Bring the
Magic to your
Program

Magical Med
Ed Toolkit

