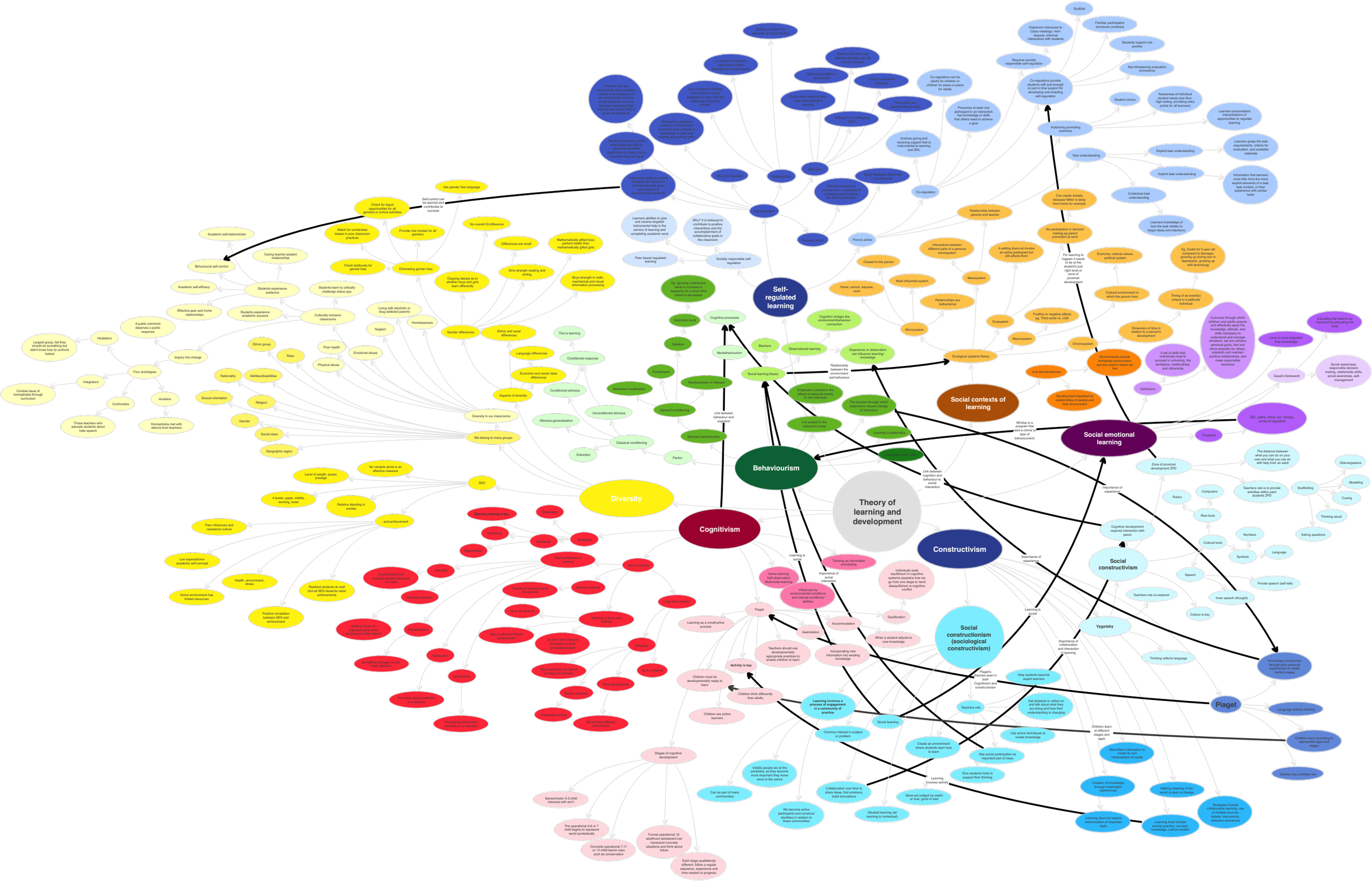
Theory of learning and development
Self-regulated learning
Ability to analyze the demands of tasks/activities
Is reflected in learners awareness of their strengths and weaknesses
Believe that effort and effective strategy use will lead to success
Believe that ability is incremental
Focus on personal progress
Children who are proactively self-regulating attend to key features of the environment and can inhibit automatic or more favoured responses that may not serve them well in particular situations
Use of effective thinking and problem solving strategies to cope with the challenges that tasks present
Exists when learners have a genuine interest in learning
View errors as opportunities to learn
Willing to try challenging tasks
SR predicts children's success in school more powerfully than IQ tests or knowledge of math and reading upon school entry
Resist distractions, persist when tasks are difficult, delaying immediate gratification to meet a more important long-term goal
Individuals' ability to control thoughts and actions to achieve personal goals and respond to environmental demands
Why is it important
Metacognition
Motivation
Apply strategies effectively and efficiently
Requires learners to choose from a repertoire of strategies best suited to the learning situation
Self-regulation
Learners abilities to give and receive targeted instrumental help in the service of learning and completing academic work
Why? It is believed to contribute to positive interactions and the accomplishment of collaborative goals in the classroom
Peer-based regulated learning
Socially responsible self-regulation
Strategic action
Perry's article
Co-regulators can be adults for children or children for peers or peers for adults
Presumes at least one participant in an interaction has knowledge or skills that others need to achieve a goal
Involves giving and receiving support that is instrumental to learning and SRL
Co-regulation
Social contexts of learning
Scaffold
Classroom discourse ie. Class meetings, mini-lessons, informal interactions with students
Familiar participation structures (routines)
Students support one another
Requires socially responsible self-regulation
Co-regulators provide students with just enough or just in time support for developing and enacting self-regulation
Non-threatening evaluation procedures
Student choice
Awareness of individual student needs (low floor, high ceiling, providing entry points for all learners)
Autonomy promoting practices
Learners personalized interpretations of opportunities to regulate learning
Task understanding
Explicit task understanding
Learners grasp the task requirements, criteria for evaluation, and available materials
Implicit task understanding
Information that learners must infer from the more explicit elements of a task, task context, or their experience with similar tasks
Contextual task understanding
Learners knowledge of how the task relates to larger ideas and intentions
Can create anxiety because father is away from home for example
No participation in decision making eg parent promotion at work
For learning to happen it needs to be at the student's just right level or zone of proximal development
Relationship between parents and teacher
Interactions between different parts of a persons microsystem
A setting does not involve an active participant but still affects them
Mesosystem
Closest to the person
Most influential system
Home, school, daycare, work
Relationships are bidirectional
Microsystem
Exosystem
Macrosystem
Chronosystem
Economy, cultural values, political system
Eg. Death for 3 year old compared to teenager, growing up during war or depression, growing up with technology
Cultural environment in which the person lives
Timing of an event(s) unique to a paticular individual
Positive or negative effects eg. Third world vs. USA
Ecological systems theory
Urie Bronfenbrenner
Environments include immediate environment and the world in which we live
Development impacted by relationships of people and their environment
A set of skills that individuals need to succeed in schooling, the workplace, relationships, and citizenship
Definitions
Dimension of time in relation to a person's development
A process through which children and adults acquire and effectively apply the knowledge, attitude, and skills necessary to understand and manage emotions, set and achieve personal goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions
Social emotional learning
Educating the heart is as important as educating the mind
Love is more important than knowledge
Casel's framework
Social awareness, responsible decision making, relationship skills, social awareness, self-management
SEL, paths, tribes, ait, mindup, zones of regulation
Programs
Mindup is a program that uses a chime (a type of behaviourism)
Behaviourism
Cognitive processes
Extinction burst
Satiation
Neobehaviourism
Bandura
Observational learning
Experience or observation can influence learning/ knowledge
Cognition bridges the environment/behaviour connection
Social learning theory
Relationship between the environment and behaviour
Emphasis is placed in the effects of external events on the individual
The process through which experience causes change in behaviour
It is evident in the classroom today
Learning is observable
Punishment
Reinforcement or Reward
Behaviour modification
Operant conditioning
Link between behaviour and cognition
Skinners behaviourism
Pavlov
Classical conditioning
Extinction
Unconditioned stimulus
Conditioned stimulus
Stimulus-generalization
Conditioned response
This is learning
Link between cognition and behaviour is social interaction
Cognitivism
Diversity
Meaning making is key
Elaboration
Receiving
Rehearsal
Strategies
Organization
Basic processes of memory
Verbal memory
Attention
Concentrating and focusing mental resources to a task
Selective attention
Fraction of a second up to 30 seconds
Sensory memory
Up to 30 seconds
Long term memory
Working or short-term memory
Has an affect on school achievement
As short term memory increases so does processing speed
Schemas
How memories are stored in long term memory
Up to a lifetime
Personal schemas
Scripts schemas
Predictable events
We all have different connections
Habituation
Automaticity
Habituation
Ability to focus on important parts while blocking out other stimuli
Something changes so you need attention
No longer paying attention to a stimulus
Processing information with little or no attention
Constructivism
Learning is social
Thinking as information processing
Active learning Self-observation Multimodal learning
Influenced by environmental conditions and internal conditions/ abilities
Individuals seek equilibrium in cognitive systems (explains how we go from one stage to next) disequilibrium is cognitive conflict
Importance of social interaction
Importance of experience
Piaget
Learning as a constructive process
Assimilation
Accommodation
Equilibration
When a student adjusts to new knowledge
Teachers should use developmentally appropriate practices to enable children to learn
Incorporating new information into existing knowledge
Activity is key
Children must be developmentally ready to learn
Children think differently than adults
Children are active learners
Stages of cognitive development
Sensorimotor 0-2 child interacts with env't
Pre operational 2-6 or 7 child begins to represent word symbolically
Concrete operational 7-11 or 12 child learns rules such as conservation
Formal operational 12-adulthood adolescent can transcend concrete situations and think about future
Each stage qualitatively different, follow a regular sequence, experience and time needed to progress
Social constructionism (sociological constructivism)
Learning involves a process of engagement in a community of practice
Piaget's tactics seen in both Cognitivism and constructivism
Help students become expert learners
Teachers role
Get students to reflect on and talk about what they are doing and how their understanding is changing
Social learning
Common interest in subject or problem
Create an environment where students learn how to learn
Use active techniques to create knowledge
See social participation as important part of class
Give students tools to support their thinking
Learning involves activity
Initially people are at the periphery, as they become more important they move more to the centre
Can be part of many communities
Collaboration over time to share ideas, find solutions, build innovations
Ideas are judged as useful or true, good or bad
We become active participants and construct identities in relation to these communities
Situated learning (all learning is contextual)
Social constructivism
Cognitive development requires interaction with peers
Vygotsky
Teachers role co-explorer
Culture is key
Thinking reflects language
Zone of proximal development ZPD
The distance between what you can do on your own and what you can do with help from an adult
Teachers role is to provide activities within each students ZPD
Scaffolding
Glance/gesture
Modelling
Cueing
Thinking aloud
Asking questions
Rulers
Computers
Real tools
Cultural tools
Numbers
Symbols
Language
Speech
Private speech (self-talk)
Inner speech (thought)
Knowledge constructed through prior personal experiences to create mental images
Piaget
Language reflects thinking
Children learn according to appropriate ages and stages
Teacher has a limited role
Children learn at different stages and ages
Mind filters information to create its own interpretation of reality
Creation of knowledge through meaningful experiences
Making meaning of the world is open to change
Learning does not require memorization of important facts
Learning must include activity-practice, concept-knowledge, culture-context
Strategies include collaborative learning, use of multiple sources, debate, discussions, reflective awareness
Self-control can be learned and contributes to success
Use gender free language
Check for equal opportunities for all genders in school activities
Watch for unintended biases in your classroom practices
Provide role models for all genders
No overall IQ difference
Differences are small
Mathematically gifted boys perform better than mathematically gifted girls
Academic self-determinism
Caring teacher-student relationships
Behavioural self-control
Check textbooks for gender bias
Eliminating gender bias
Girls strength reading and writing
Boys strength in math, mechanical and visual information processing
Academic self-efficacy
Students experience resilience
Students learn to critically challenge status quo
Ongoing debate as to whether boys and girls learn differently
Effective peer and home relationships
Students experience academic success
Culturally inclusive classrooms
Living with alcoholic or drug addicted parents
Homelessness
Neglect
Gender differences
Ethnic and racial differences
A public comment deserves a public response
Hesitators
Largest group, felt they should do something but didn't know how to confront hatred
Inquiry into change
Ethnic group
Race
Poor health
Emotional abuse
Physical abuse
Language differences
Economic and social class differences
Aspects of diversity
Four archetypes
Integrators
Combat issue of homophobia through curriculum
Confronters
Those teachers who educate students about hate speech
Avoiders
Homophobia met with silence from teachers
Nationality
Abilities/disabilities
Sexual orientation
Religion
Gender
Social class
Geographic region
Diversity in our classrooms
We belong to many groups
SES
Level of wealth, power, prestige
No variable alone is an effective measure
4 levels: upper, middle, working, lower
Relative standing in society
...and achievement
Peer influences and resistance culture
Low expectations-academic self-concept
Health, environment, stress
Home environment has limited resources
Resilient students do well (not all SES students resist achievement)
Positive correlation between SES and achievement