Tools for Teachers (2022) by *Ollie Lovell (and see ERRR podcast http://ollielovell.com/podcast)*

Planning Summary by Helen Reynolds @itsalearningcurve.education

Content	Do This
Introduction: Education Research Reading Room (ERRR) podcast started 2017, accumulation of valuable/actionable insights emerged → tactics/techniques/mental models →tools!	• Book = collection of tools from experts • Tools are things we adapt to our needs
***Part 1: Teach:* 1. Explicit Instruction (EI):** EI is structured/unambiguous/direct/effective/ efficient, consists of learning goals + explicit instructional methods to move students (Ss) from novice → expert by moving material from working memory (WM) to long-term memory (LTM) + enabling chunking/automaticity, PIC model: 1. Plan (a. Content: K must be explicit/ use 'call & response' 'if/then' statements/bullet-proof definition/learning outcomes /K structures/examples & non-examples/revisit & review b. Participation: attention cues/ engagement norms) 2. Instruct (a. Introduce: relevance (90 sec)/activate prior K (via universal experience/shared/previous work) b. I do: teacher (T) models thinking process (explicitly)/ provides non-examples based on critical features/provide templates/avoid transience c. We do: step-by-step through the process d. You do: sufficient practice = chunking → LTM, easier to recall) 3. Check for Understanding (CfU →gather data →adapt) (a. Ask questions (qs): cold call/no opt-out/sample all students, reject self-report b. Observe Standardize the format/tracking not watching/set multiple problems = all engaged/promote a culture of error + seeking help c. Provide feedback/adapt instruction: e.g. provide cues & prompts/'I'll come back to you'/pair-share again/de-escalate to multiple choice/explain your thinking/read the answer/ reteach/ respond supportively to incorrect answers).	• Expert knowledge (K) structured differently = can quickly choose best method/approach • Automaticity is the key to mastery • Participation needs planning as much as content (see Teach Like A Champion) • Plan very clear learning intentions • Always explicitly make your (expert) thinking visible to students • Increasingly large chunks helps automaticity • CfU is the MOST important thing you can do = collect data →inform instruction • Feedback teaches them something new/ motivates them to learn something new • Feedback is NOT just written comments – can be 'in the moment'/verbal/peer • Develop warm/enthusiastic tone to deal with errors/corrections
2. Behaviour Management (BM): Theory: B stems from need to belong/BM designed to safeguard rights/is a curriculum/should be responsive AND proactive/most powerful factor = norms/'certain/immediate' consequences trump severe ones/*unexpected* rewards better for intrinsic motivation/is an act of maintenance. Proactive BM: Bill Rogers 3 phases (establishment + maintenance & consolidation + cohesion), first lesson = answer these 2 qs: 'how will I belong' + 'what kind of T are you/how will you lead & teach me'?/do an About Me sheet (shows care/interest) Routines: establish routines for entry/exit/transitions early on (1st lesson or sooner)/schedule 'routine reviews'/routine for all regular activities Tone: supportive enthusiasm works best, if not done/met: acknowledge good/ explain purpose of routine/emphasise practice as opportunity not chore. Responsive BM: Respond to issues by: describe/direct/offer limited choice, give take-up time (to avoid stand-offs), tactical ignoring (to avoid blow-up), partial agreement (to deal with Ss arguing). Scripts as bridge between proactive/reactive: Issues: Ss makes racist remark/won't leave/says didn't mean it/doesn't know what they did/whole class loud or acting out (construct 'Noise-o-meter'). Following up on B: by conversation (S should leave feeling valued/supported) *next* detention (righting wrongs) *next* behaviour plan/further sanctions. Ts ensure follow-up/ need support from leadership → safety valve (short term only) = remove Ss or T leaves (on pretext),	• Ss have a social need to belong; Ts should engender this so it's conducive to learning • 1st lesson crucial to set culture/routines • Script (and learn – don't read) your intro to your new classes to answer the 2 qs ← • Have clear + simple framework for rules e.g. 'Prepared/Polite/Productive' • Have them provide examples/give summary • Read the About Me sheets/remember things • Routines MUST be consistent: select wisely, review often, pick up issues/practice • See p99-103 for BM scripts & Noise-o-meter • Remarks can be used as threshold moments • Helpful if a member of leadership team introduces new Ts to classes/monitors or assists with issues e.g. safety valve
3. Motivation (M): Theory= M allocates attention/is a cost-benefit analysis for Ss/not a general trait/determined by success. Habits deliver results. Develop M by showing it's: valuable (say 'because it means that…'/use a buddy system/pair-share 'what are the benefits of…'/get Ss to feel the value/get role model to share/repeat & follow up with 'valuable message')/ normal (speak like it's the norm/use 'we' language/highlight a trend/ make it visible & reinforce it/leverage by ensuring Ss feel they belong), easy (make: it super clear what they have to do/ 1st step really easy/automatic, help them believe they can do it ('you did it before'). Show you respect your Ss as humans, + you care whether they succeed.	• Motivation follows success initially, then bi-directional • Ss do cost-benefit analysis to decide what to attend to: Ts should ↓ cost + ↑ benefits • Unconscious habits ↓ for little effort • Repetition is key to developing automaticity/ reinforcing value • Highlight unproductive norms
4. Regulation and Relationships: Often 5% hard to reach. Theory: 2 forces → relationships (Rels) = foundation for regulation (Reg), then interlinked. Secure early attachment →self-worth/ Reg of emotions & deal with stress/resilience. Reg undermined by trauma/rewires brain's stress response = definition of trauma, can lead to hyperarousal/dissociation/shame, can be healed by Rels. Proactive well-being (WB) strategies: Develop strong Rels (positive interactions>corrective/ show interest in Ss hobbies & interests/attend S events, reject deficit theorising (Ss lack something so can't succeed))/teach Ss about Reg (Dan Siegel brain model* & 'flipping your lid' & name it to tame it)/provide structure/manage transitions/give brain breaks/safe period (for significant trauma)/preventative eating (for Ss who don't get meals)/communicate with parent & carers/maintain professional boundaries. Reactive WB strategies: each day is a new day/motivate with positivity not punishment/disrupt down-ward spiral/ time 'in' not out/ give them equipment/Tetris disrupts recurrent visual trauma.	• Childhood trauma rewires the brain/makes regulation more difficult • Know your Ss: hobbies/sports/interests, and show that you do • Beware any 'deficit rationalizing': keep expectations high for all Ss • *See Dan Siegel's model of the brain (drdansiegel.com) • Keep snacks/spare pens etc. available • Watch out for downward spirals: disrupt with simple tasks/sitting next to you – inclusion not exclusion

***Part 2: Lead:* 5. Purpose:** of school-based education (ed) Daniel Willingham: Enlightenment (understanding world through reason, school check unhelpful impulses) vs. Romantic (not reason, experience, schools nurture/don't interfere) Kieron Egan: socialization (learn norms /contribute to society) vs. Platonic ideal (best that's been thought/said) vs Rousseauian ideal (Ts give Ss stuff so they grow/develop). Dylan Wiliam: transmission of culture (wisdom of the ages) vs personal empowerment (power to take control over their lives) vs. prep. for work & citizenship (jobs + active role), often in conflict, there are trade-offs. Michael Stephen Schiro: Ts as scholar academics (give Ss accumulated K) vs learner-centred educators (S as client, ed tailored to their needs) vs Ts of social efficiency (ed for citizenship, society is client) vs Ts of social reconstruction (ed to build a more just/brighter world). Distilled into: reasoning with K/natural development/socialization/social reconstruction. Inherent tensions between them – produces balance if you: are K driven (not belief driven)/choose your friends wisely/think it possible that you may be mistaken.	• Things to ask yourself about your view of education: who is the 'client', what are some trade-offs? • Disagreements usually arise because of difference in beliefs – useful to understand each other's beliefs • Benefits to/development of students vs society may conflict → tension • Tensions can help develop balance in curriculum/pedagogy/vision • 4 different views, with inherent tensions - see diagram p 171 for tensions • Keep an open mind – you may be mistaken
6. Curriculum: needs planning in terms of standards/school beliefs. Three mistakes: activity orientation/content coverage/test prep. Big idea: backwards planning (start with outcomes) Planning Model 1: Understanding (U) by Design: 1. Identify desired results (enduring U/ essential questions) 2. Determine assessment evidence (what does performance look like/ always involves trade-offs →can't draw unlimited conclusions) 3. Plan learning experiences. Planning Model 2: Kinds of U: everyone: somatic (age 0-2, due to body/sense/ emotions) + mythic (age 2 -8) + romantic (age 8-15/ inspiring feats), need direction to philosophic (age 15-22, related to -isms) + ironic (age 22+, selecting U or framework), teach for cognitive tools (enable movement between Us). Five Curriculum Design Principles: 1. Performance (how do Ss demonstrate success in authentic contexts?) 2. K (what do they need to know?) 3. Cohesion (is it coherent horizontally (across year) + vertically (→classroom) + temporally (between years)?) 4. Spacing (so that ideas stick) 5. Richness (how will it enrich their lives?)	• Curriculum is how we translate our beliefs → our Ss experience • Easy to plan for coverage/activities – avoid! • Order: desired results → assessments that indicate Ss have met them → learning experiences/instruction • Useful to bear in mind types of U at different stages →guides instruction • Goal is cognitive flexibility incl. variety of K/ mental models/concept/understandings • If time is short focus on K, revisit as much as poss; richness/ coherence can be built on it
7. Leadership: 3Ms: Mission (sets the course)/Mindset (to bring people along)/ Management (what keeps wheels turning). Mission: well-crafted +communicated → vision statement has 1. selection for alignment (people who support/manifest/strengthen mission) + 2. promotion of culture (how people naturally work, even when not observed), clear T & L policy. Mindset: do most important things first + bring people with you, believe all Ss can achieve (reject deficit models), avoid burnout/sustain focus on T&L, put staff wellbeing first, use 'theories of action (ToA)' (beliefs about how the world works) to drive change via engagement (rather than expect Ts to comply)/ incl. be prepared to change ourselves/doing prep work/checking in/priming. Management: get clear picture with data (indicators: lagging = what did happen vs leading = what might happen), repetition → gets vision instilled, lock important things into the calendar, use ToA →change (identify problem/ sort solution design criteria/agree standards of evidence), whole school initiatives →be clear on variety of standards of evidence/be prepared (people will have different views).	• Mission should be lived & prominent • Right people on the bus, bus going in the right direction (whoever's driving) • "Culture eats strategy for breakfast" • See links p. 214 for T&L policies • Don't talk about 'ability' →fixed mindset • Sustainable change →shift Ts mindsets → engage their ToAs + core beliefs • Getting engagement = lots of prep outside of meetings + checking in & priming • Don't guess, get data, revisit regularly • Speak your vision into existence
***Part 3: Learn:* 8. Reading and Evaluating Educational Research:** will look at intervention + measure its effect on a outcome. Maintain Perspective: it's 'what works *for*…' not 'what works', look for 'why' & 'how' (mechanisms) behind outcome, ask 'who did the research' (look for reliable sources/well regarded). Read for Detail: tests for significance = could it be chance? Could say effect ✓ but not how big, effect size = variation with intervention vs. what already exists affected by measurement design (MD)/depends on proximity of MD to inter-vention usually written by researcher (vs. 'distal' test e.g. standardized test)/affected by age of participants (younger learn faster) → **don't** compare effect sizes, intervention mechanisms may not be what they say they are, check that citations support the claims (they often don't). Read with an Open Mind: read for understanding not for justification (avoid 'myside bias' = evaluate etc. biased to my prior attitudes & opinions), all research is biased (only focus on academic outcomes, there may be side-effects e.g. effect of structure in S independence), find smart people you disagree with and read their stuff.	• Most important question is '*why* does this work' (or not work) – what's the causal chain • Without plausible mechanisms we get lethal mutations • Targeted proximal assessments give bigger effect sizes than general distal ones • Don't measure (long term) side-effects (e.g. confidence/resilience) via assessments • Almost everything's based on research – can find it to back up anything • Ask 'which 2 research results do you believe/trust but you don't like?'