Peps McCrea's four books

Planning Summary by Helen Reynolds @itsalearningcurve.education

Lean lesson planning (2015) - Main points	Do This
Lean Foundations **Defining lean** – maximize learning from every minute of planning, small changes for big gains. **Lean mindsets** – **1. Process:** Planning as a thinking process, **2. Pareto:** Do less better (80/20) **3. Growth:** Anyone can be a great planner with effort **4. Design**: improvement = systematic changes. Planning is cold, classrooms are hot. **Lean habits** – figure out which bits of planning should be consistent and which creative.	• Remember 80/20 • Be more architect than builder • Planning = where are they starting from, where to you want them to get to, how will you know they have got there, how can you best help them
Habits for planning **1. Backwards design**: Always start with the end in mind and spend a LOT of time to get excessive clarity, milestones are cumulative, distributed, measurable, clear (to the Ss). **2. Knowing knowledge**: building tools in their heads = conceptual understanding – justify/explain, learning how to use them = technical proficiency – solve/create, isolated-connected, rigid-adaptive. **3. Checking understanding**: get inside their heads with single student q/traffic-lighting/ multi-student q (best, fast, efficient w/MWB), diagnostic qs, great teachers use transition assessment. **4. Efficient activities**: teach for attention, fun is success, low floor/high ceiling, bake feedback in, challenge is between comfort and confusion. **5. Lasting learning**: = longevity + fluency, no multi-tasking (= task switching), anchor thinking/ spaced (Ebbinghaus) deliberate practice **6. Inter-lesson planning**: = between lesson planning, forwards and backwards very important	• Avoid activity/coverage based planning • Work out 2-5 'learning milestones' • Is the focus building conceptual understanding or learning to use it better? know what you're doing • if I taught it did they learn it? • Work on exit assessment to inform planning, check timing • Lemov- what's the least I need to do to get them there • Deliberate practice – core/first/weeks • Planning for memory is economic of time • Plan sequences not single lessons
Habits for growing **1. Building excellence**: be aware, build habit architecture (slowly), optimize the environment, make the first step and keep going. **2. Growth teaching**: 'growth not great' teaching, experiment, evaluate impact after its bedded in using progress/observations/surveys, beware biases/evaluating too soon/proxy indicators **3. Collective improvement**: create spaces/time to share, make sharing a habit.	• Excellence is a habit – build it • Be mindful • Diagnose/design/teach/measure/learn • Treat evidence as starting point • Think carefully about what to evaluate • Make a framework for sharing practice
Memorable Teaching (2017) – Main points	**Do This**
Intro: 1. Why Memory? Teachers are memory enablers, it underpins learning **2. Memory architecture**: LTM/WM, durability vs depth grid, attention+STM+reworking = authoring, Matthew Effect = WM↔LTM	• We need scalable models for our practice in classrooms • Talk about how memories are authored
9 Principles: **1. Manage information**: Eliminate distractions – displays/ phones/music/clocks/interruptions/ redundant info/real-life anecdotes **2. Streamline communication**: Text/speech/diagrams/video/gestures vary in flexibility/ linearity/ ephemerality, clarity = leanness + lucidity (speed, fonts, contrast, labelling) **3. Orient attention**: tell them what to attend to, set and stress their filter / follow with gestures/accentuating/ highlighting, capitalize on reacting to novelty, qs to orient internally **4. Regulate load**: WM works best with 2/3 things*, beware expert induced blindness, *depending on complexity/dependence on LTM/ autonomy/ familiarity SO break it down/ use familiar contexts or LTM/ offload WM to the board **5. Expedite elaboration**: to help modify LTM, priming (adv. organizers/skeletons)/ tethering (inference/ analogy/ bridging)/mnemonics/stories **6. Refine structures**: initially LTM can be blurry/shallow/simple, we can refine with variation (discern using examples/ non-examples, relations, contrast similar concepts)/definition (articulation, reorganization) **7. Stabilize changes**: changes to LTM need to be durable and accessible, retrieval strengthens memories/makes them durable (beats re-exposure) if answerable/low stakes/they grade it/spaced/ interleaved, aim for automaticity/long-term gains **8. Align pedagogies**: Initially provide skeleton with just enough structure, follow up with practice, increase complexity, me-we-you, mindful of WM **9. Embed metacognition**: meta-knowledge (principles and strategies that help learning), self-regulation (needs goal clarity, self-awareness), calibration (get them to predict, evaluate, reflect) **Remember we need to be in this for the LONG GAME.**	• Monitor my interruptions to their thinking • Take the shortest route • Actively choose most effective modality • Double up with speech/diagram channels • Vary how I orient their attention • Remember to set and stress • Think of ways to offload when introducing complex new info/ideas • Prime with adv organizers with Big Picture • Plan to tether consciously • Explicitly use variation to refine structure • Build in more reorganization • Check retrieval has minimal clues • Actively select the right tool (pedagogy) • Be explicit about learning strategies • Develop attention tools: alarms, check-ins • Metacognition uses up WM, so introduce gradually

Motivated Teaching (2020) – Main points	Do This
Intro: 1. Why Motivation? Motivated students bring care + commitment + work hard, influences behaviour, learning, wellbeing, but lack of clarity on what to do **2. The mechanics of motivation**: Attention is the gatekeeper, motivation allocates attention for the best investment based on value/ expectancy/ cost, is largely unconscious, they use heuristics **3. Motivation for learning**: Motivation is situation-specific not a personality trait, needs building (not with fun/sweets), reducing cost/increasing value	• Plan to make explicit the value of paying attention • Think/teach them about attention • Give them good heuristics early on • Motivation for learning needs actively building with the drivers
5 Drivers: **1. Secure success**: Expectancy = anticipation of success (and value of that success), potent but fragile, aim for av. success rate of 80%, precise pitching/chunking, help them frame/define success AND attribute to their efforts not luck AND be in their control, deal with failure (pre-empt, reframe, reattribute), aim for proficiency (agency, curiosity, awe, fluency) **2. Run routines**: Cost = effort + attention needed for benefit, routines (behavioural AND instructional) reduce effort, are simple/clear cut/stepped, started with distinct/multi- modal/punchy cues, you can stack/nest them, have to train them (rehearse/ practice, stick with it! **3. Nudge norms**: Evolution – we refer to others, conforming is a quick and safe bet, nudge by changing the norm they see (go for all doing it, point out/ model positives), amplifying approval (peer shout-outs, catch being good, stand and share, focus on what we want NOT what we don't) **4. Build belonging**: influence of norms mediated by belonging, which can be all-consuming in adolescents, we can signal status by recognizing/including /framing, use 'we', build affinity (purpose, identity, common ground), beware tribalism between groups, status is bestowed, trust is earned (credibility, care, consistency) **5. Boost buy-in**: hard to give genuine choice (they don't know what they don't know), buy-in=how much the course of action is actively supported, achieved through exposing the benefits (frame benefits for *them*, what are benefits *now*, don't overegg it)/offering opt-in (they elaborate benefits, detail how they'll do it, commit in writing, using metamotivation). **Motivational architecture means you can live with attention and intention**	• Get them to care about stuff they didn't use to care about (Wiliam) • Secure early success with a hard thing • Get it so they see it's due to effort • Explicitly reframe failure • Build/train explicit routines from the start, with sticky names • Use really punchy cues • THINK 'what we permit, we promote'- be clear what I permit and why • Capitalize on emerging norms I want • ALWAYS model it • Build belonging by signalling status • Try to have a unifying purpose/identity • They don't know what the benefits are because they're not you – make it vivid, real, simple, obvious, clear • Micro buy-in 'Are you up for it?' • Teach metamotivation • NB: Drivers 1 – 4 largely *unconscious* Driver 5 can be *conscious*
Developing Expert Teaching	**Do This**
Intro: 1. Why expertise? PD is the most powerful lever for improving education, but it's hard (task complexity, habit inertia, fuzziness between teaching and learning), but theory of expertise is empirically grounded (which is rare) **2. The anatomy of expertise**: Knowledge is the root cause of expertise,(contextualized/fluent/task specific) also needs PCK mechanics (cause and effect) and strategies (to produce the effects), advanced teachers have autopilot/can simulate/make good judgements **3. The essential ingredients of PD**: needs clarity, a list of ingredients that make good PD, rather than packages (instructional coaching, lesson study etc.)	• Be aware of habits (for good and bad) • Remember this (teaching) is harder than brain surgery • Refresh causes and effects for PCK • Build expertise around curriculum/assess-ment/instruction/motivation/regulation • Use ingredients-first thinking • Look at what is essential and what is not
6 Ingredients: 1. Get It: 'it' is the knowledge needed to do the task of teaching (insights of mechanics), get the research (descriptive/ correlational/ explanatory = most useful), process it (triangulate/translate/temper), watch for second order effects 2. See It: what 'good' looks like (models of strategies that are focused/ faithful/feasible), build flexible actionable knowledge **3. Try It**: Simulate the classroom (because classrooms are messy)/do a little bit of change/make it your own/do it many times/get people you trust to feedback **4. Keep It:** challenges of making new habits are effort (replace don't add)/discomfort/unfamiliarity/de-performance/reversion **5. Fit It**: PD must be tailored to development needs of teachers, powerful PD has data driven diagnoses + medium term prescriptions (not one day PD) + is responsive, expertise is a specific knowledge distribution (not a trait) **6. Own It**: teachers develop expertise when they invest time/effort/attention, for which there is a cost, helped by buddying/long termism/commitment goals/ getting support for goals. **PD is about developing not judging.**	• Find the useful research & process it • Build research literacy • Highlight crucial features; connect the mechanics • Balance opportunity costs • Remember change/ practice is uncomfortable • Habits take TIME to change, to keep • Use data from observations/assessment to diagnose/develop PD • Find a PD buddy • If I own my development, I will improve faster