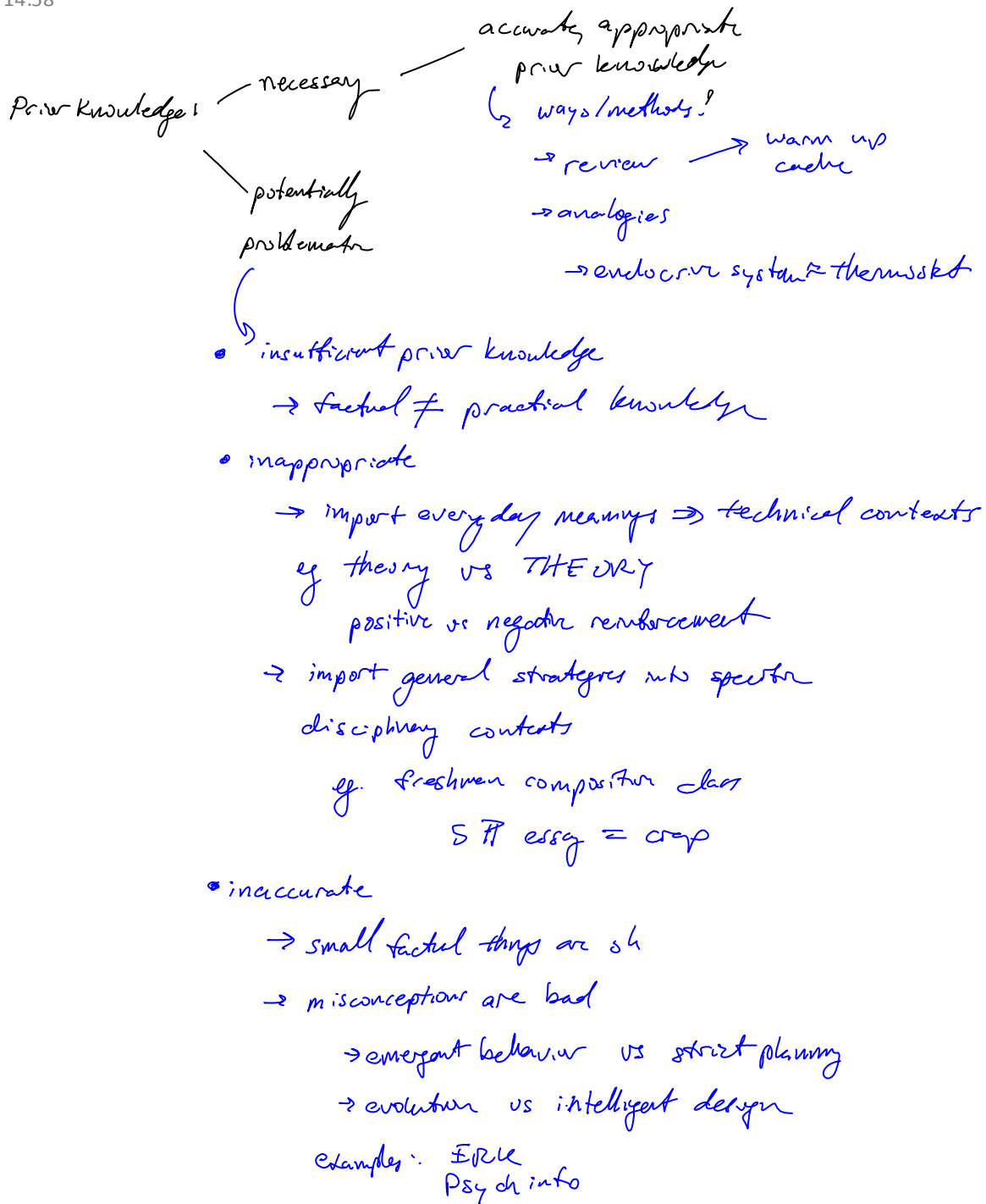


# Organizing Knowledge

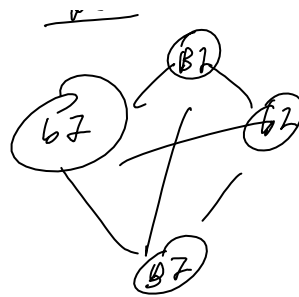
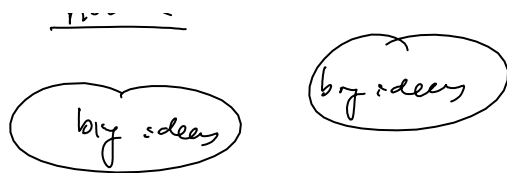
Thursday, April 05, 2012  
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## Organization of Knowledge

what's the big difference between novice and expert knowledge organization





- ⇒ efficient at learning recall
- ⇒ better at self consistent
  - novice can double think
  - no connection

- ⇒ what can we do as teachers?
- aid in structuring w/ scaffolding
- be explicit & deliberate w/ a concept map or graphic organizer

Component skills

- experts need to decompose stuff into component skills
- integrate the skills
- apply the skills

$$\frac{1 \text{ mi}}{1 \text{ hr}} \times \frac{1 \text{ hr}}{60 \text{ min}} = \frac{1 \text{ mi}}{60 \text{ min}}$$

$$\frac{3 \text{ mi}}{60 \text{ min}} \times 6 \text{ min} = \frac{18 \text{ mi}}{60} = \frac{3}{10} \text{ mi}$$

$$d_s(0) = 0 \quad d_j(0) = \frac{3}{10} \text{ mi}$$

$$d_s(t) = \frac{5 \text{ mi}}{60 \text{ min}} t \quad d_j(t) = \frac{3}{10} \text{ mi} + \frac{3 \text{ mi}}{60 \text{ min}} t$$

$$\frac{\bar{s}}{60} t = \frac{3}{10} + \frac{3}{60} t$$

$$\bar{s} t = 18 + 3t$$

$$2t = 18 \quad t = 9$$

/ 15 min