Bound better than for two part codes

- ▶ Simple bound as good as bound for two part codes (MDL) but enables online compression
- ▶ Suppose we have K copies of each expert.
- ▶ Two part code has to point to one of the KN experts
  $L_A \leq \log NK + \min_i L_i^T = \log NK + \min_i L_i^T$