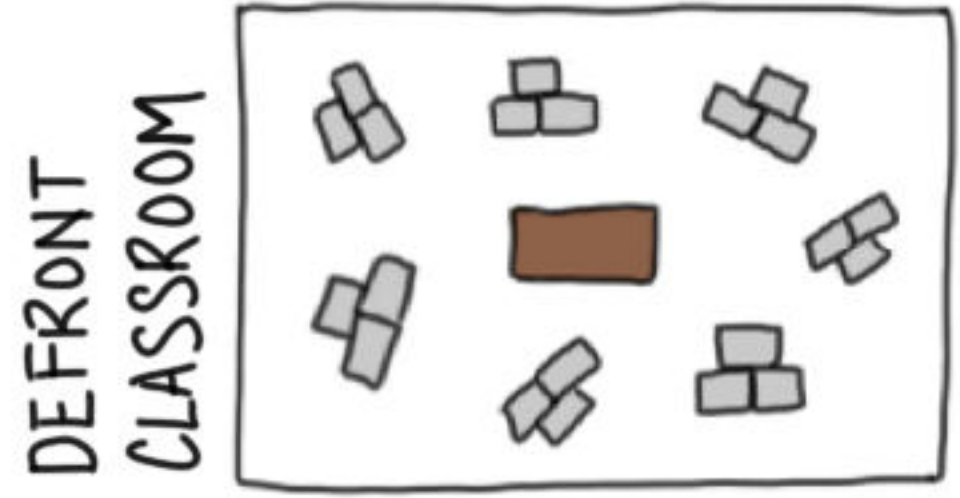
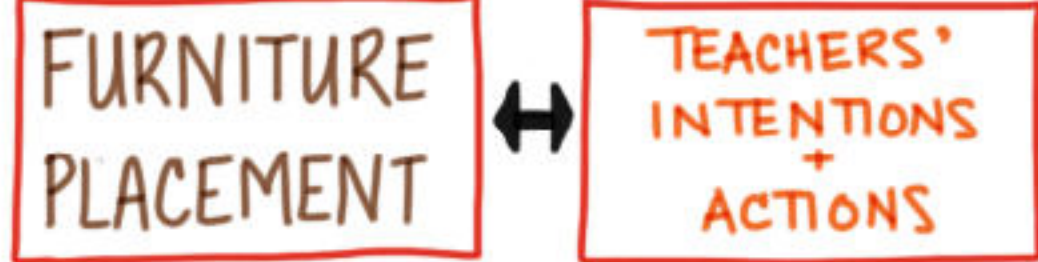


DEFRONT



DESKS IN DIFFERENT DIRECTIONS

- ↑ STUDENT COLLABORATION
- ↓ TEACHER TALKING
- ↑ TEACHER CIRCULATION



THINKING IS MESSY

- ✓ STRAIGHTNESS → **PASSIVE** LEARNING
- ✓ SYMMETRY
- ✓ FRONTING
- ✓ DE-STRAIGHTEN → **ACTIVE** THINKING
- ✓ DE-SYMMETRIZE
- ✓ DE-FRONT

NOT TOO CHAOTIC OR ORGANIZED

- ↑ SAFETY TO TAKE RISKS
- ↑ FREEDOM TO TRY + FAIL

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- SHIFTS POWER AWAY FROM TEACHER ONTO STUDENTS
- MORE STUDENTS ENGAGE MORE FREELY

KEEP THINKING Qs

- 1 PROXIMITY Qs DON'T ANSWER
- 2 STOP THINKING Qs DON'T ANSWER
- 3 KEEP THINKING Qs ANSWER THESE

KEEP THINKING QUESTIONS CLUES

- AVOID QUESTIONS ASKED EARLY IN TASKS
- ARE QUESTIONS ASKING FOR MORE OR LESS ACTIVITY, WORK OR THINKING?

ANSWER A QUESTION WITH A QUESTION ... THEN LEAVE!

ISN'T THAT INTERESTING?
IS THAT ALWAYS TRUE?
WHY DO YOU THINK THAT IS?
WHY DON'T YOU TRY SOMETHING ELSE?
ARE YOU ASKING ME OR TELLING ME?

AVOID GIVING TOO MUCH HELP/INFO

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- ONUS ON STUDENTS TO DO THE THINKING
- STUDENTS UNDERSTAND THEY NEED TO DO THE WORK
- STUDENTS ARE HEARD BUT EMPOWERED NOT HELPLESS

VERBAL INSTRUCTIONS

WHEN TO GIVE TASKS

- EARLY IN LESSON
- ↑ STUDENT ENERGY
- ↓ TEACHER PRETEACHING

BEGINNING OF LESSON → TEACHER ADDRESSES WHOLE CLASS

WHERE TO GIVE TASKS

- STANDING + CLUSTERED
- ↑ STUDENTS FASTER TO TASK
- ↓ FEWER QUESTIONS ASKED

FIND LOCATION WITH ENOUGH SPACE TO BE COMFORTABLE

HOW TO GIVE TASKS

- VERBALLY, WITH KEY INFO WRITTEN WHILE TALKING
- ↑ STUDENT TALKING ABOUT MATHEMATICS/TASK
- ↓ AMOUNT OF DECODING WITH TEXTUAL INSTRUCTIONS
- ↓ NUMBER OF QUESTIONS ASKED

20+5 → 100
10+10+5 → 500

Product

- AVOID SAME SPOT TO WRITE EACH TIME
- RECORD IMPORTANT DETAILS BUT NOT ENTIRE SCENARIO

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- STUDENTS RELY ON EACH OTHER TO FIGURE OUT WHAT TO DO
- "STORYTELLING" APPROACH IS ACCESSIBLE

CHECK UNDERSTANDING Q

"HOMEWORK" → FOR TEACHER FOR MARKS MIMICKING

CHANGE NAME

"CHECK-YOUR-UNDERSTANDING QUESTIONS" → FOR STUDENTS FOR UNDERSTANDING THINKING

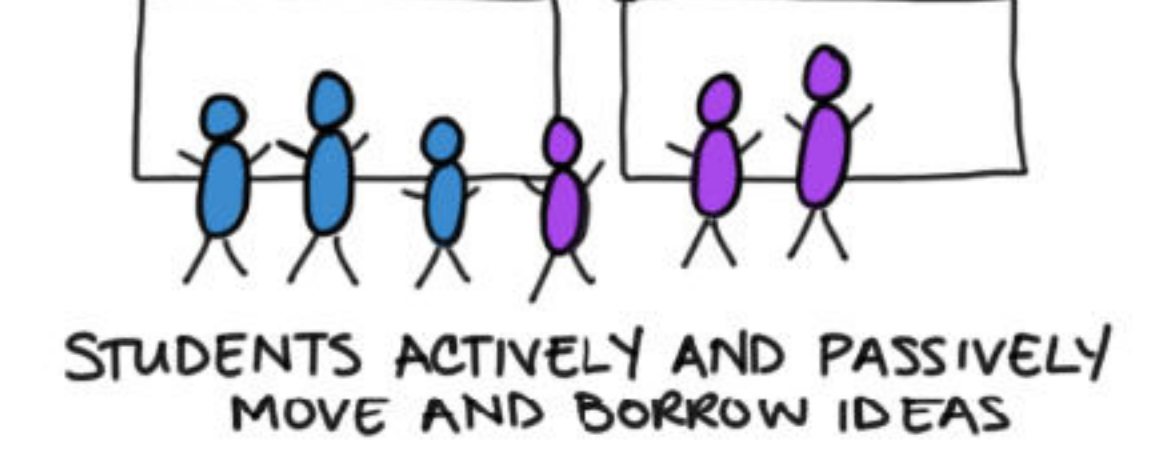
TIPS FOR CYUQs SUCCESS

- TALK ABOUT THEM AS OPPORTUNITIES TO LEARN FROM MISTAKES (NO RISK)
- AVOID "PRACTICE" AS IT SUGGESTS MIMICKING
- AVOID "ASSIGNMENT" AS IT SUGGESTS MARKS
- PROVIDE ANSWER KEY
- PROVIDE AUTONOMY ON WHETHER IT IS COMPLETED
- NOT FOR MARKS
- PROVIDE WORKED SOLUTIONS LATER - AFTER STUDENTS HAVE TRIED PROBLEMS

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- STUDENTS HAVE AUTONOMY
- SPACE TO MAKE AND LEARN FROM MISTAKES
- STUDENTS DO NOT HAVE TO BALANCE PRESSURE OF MARKS WITH HOME LIFE DEMANDS
- STUDENTS CHOOSE WHEN, HOW AND IF TO DO THEM

MOBILIZE KNOWLEDGE



TEACHER MOVES

- REDIRECT GROUPS TO OTHER GROUPS WHEN STUCK
- A vs B HAVE GROUPS WITH DIFFERENT ANSWERS TALK TOGETHER
- HAVE GROUPS WITH DIFFERENT APPROACHES TALK TOGETHER
- BE LESS HELPFUL

EFFECTS OF KNOWLEDGE MOBILITY...

- ↑ STUDENT INDEPENDENCE
- ↑ DEPTH IN THINKING
- ↓ SHIELDING WORK
- ↑ POROSITY BETWEEN GROUPS
- ↑ SENSE OF ALL HAVING SOMETHING TO OFFER

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- SENSE OF LARGER COLLECTIVE LEARNING TOGETHER
- RELIANCE ON PEERS INSTEAD OF TEACHER
- EMPOWERMENT OF STUDENTS LEADS TO INDEPENDENCE

CONSIDERATIONS FOR

MULTILINGUAL LEARNERS

- MAKE KEY WORDS, SYMBOLS, VISUALS VISIBLE TO ALL
- ENCOURAGE USE OF TRANSLATION TOOLS
- ENCOURAGE USE OF PRIMARY LANGUAGE
- GIVE SENTENCE STEMS FOR GROUP DISCUSSION
- LISTEN AND OBSERVE TO PROVIDE SCAFFOLDS AS NEEDED

SPECIAL EDUCATION SUPPORTS

- STAND CLOSE TO/BE AWARE OF STUDENTS NEEDING AUDITORY ACCOMMODATIONS
- COGNITIVE LOAD REDUCED BY VISUAL CUES THAT ACCOMPANY VERBAL INSTRUCTIONS
- EXPLAIN BEFOREHAND QUESTIONS THAT WILL BE ANSWERED
- EVERY STUDENT CAN ACCESS "PREFERENTIAL" SEATING

UNIVERSAL DESIGN FOR LEARNING

- PROVIDE CHOICE WITH CHECK-YOUR-UNDERSTANDING Qs
- ENSURE ALL STUDENTS HAVE ACCESS TO INSTRUCTIONS

BUILDING THINKING CLASSROOMS
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CORWIN, 2020
COLLABORATION WITH @WRDSB EDUCATORS
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