## Sample Classroom Interventions for Reading and Work Engagement from Jim Wright

## Motivating Students Through Collaboration: Numbered Heads Together

Description. Teacher questioning during whole-group instruction is a key method that instructors use to monitor student understanding of content. Ideally, instructors should use a mix of closed-response queries (i.e., limited number of correct responses) and open-response questions (i.e., wide range of acceptable answers, opinions, or judgments). Students should also be given sufficient wait-time to formulate an adequate answer, and the teacher should provide targeted performance feedback (Maheady et al., 2006). Numbered Heads Together is an instructional technique build upon peer collaboration that provides the supports and structure necessary to promote effective teacher questioning and student responding (Maheady et al., 2006). This technique can be useful for students with emotional/behavioral disorders (EBD) (Hunter \& Haydon, 2013).

Procedure: During whole-group instruction, Numbered Heads Together is implemented using the following steps:

1. Create teams. The teacher divides the class into 4 -person teams. Ideally, each team includes a mix of high, average, and low-achieving students. Students in each team assign themselves the numbers 1 through 4. (Note: If a team has only 3 members, one student takes two numbers: 3 and 4.)
2. State a question. The teacher poses separate queries to the class. After each question, the instructor tells students to "put your heads together, think of the best answer you can, and make sure that everybody in your group knows that answer."
3. Allow think-time. The teacher gives students 30 seconds to discuss an answer in their groups.
4. Elicit student responses. The teacher randomly selects a number from 1-4 and says, "All number [1, 2, 3, or 4] students who know the answer, raise your hand." The teacher then calls on one student with hand raised and asks him or her to give the answer. The teacher next says, "How many [1, 2, 3, or 4$]$ students think that that answer is correct? Raise your hand." [Optional: The teacher can call on additional students with hand raised to elaborate on a previous student's answer.]
5. Give teacher feedback. Finally, the instructor gives feedback about the answer, e.g., verifying that it is correct, elaborating on the answer, providing corrective feedback for an incorrect response.

Tips for Use. Teachers may wish to create standing groups for Numbered Heads Together to allow for more rapid transition into student teams. Also, the instructor might post a checklist that reminds students of appropriate NHT behaviors and briefly review that checklist as a pre-correction strategy prior to moving into the NHT activity.

## References

Hunter, W., \& Haydon, T. (2013). Examining the effectiveness of numbered heads together for students with emotional and behavioral disorders. Beyond Behavior, 22(3), 40-45.

Maheady, L., Michielli-Pendl, J., Harper, G. F., \& Mallette, B. (2006). The effects of numbered heads together with and without an incentive package on the science test performance of a diverse group of sixth graders. Journal of Behavioral Education, 15(1), 25-39.

## How to: Increase Motivation: Learning Contracts

Description. A learning contract is a voluntary, student-completed document that outlines actions the learner promises to take in a course to achieve academic success. This contract is signed by the student, the instructor, and (optionally) the parent. Benefits of all such contracts, however, are that they provide academic structure and support, motivate struggling learners by having them pledge publicly to engage in specific, positive study and learning behaviors, and serve as a vehicle to bring teachers and students to agreement on what course goals are important and how to achieve them (Frank \& Scharff, 2013). NOTE: See the ODQUDFRQNDFMAppearing later in this document DVDQH DP SOIRJhow VKAH- contracts can be IREP DWHG

Procedure: The learning contract is typically completed in a meeting between the student and instructor. (In middle and high schools, the parent may also be a participant.) While there are many possible variations on the learning contract, they often contain these components (Frank \& Scharff, 2013; Greenwood \& McCabe, 2008):

- Statement of Purpose. The contract opens with a statement presenting a rationale for why the contract is being implemented. A sample statement might be: I am taking part in this learning contract because I want to improve my grades and pass this course.
- Student Actions. The contract lists any actions that the student is pledging to complete to ensure success in the course. Suitable targets for learning contract items might include attendance, class participation, completion of classwork or homework, seeking of instructor help, etc. See Figure 1 for a listing of sample actions that might be written into a learning contract.
- Teacher Actions. The learning contract can be strengthened by adding a section detailing those


## Figure 1: Sample Student Learning Contract Items

- Attendance. I will attend at least 80 percent of class sessions.
- Course Participation. I will contribute at least one comment to every in-class discussion.
- Readings. I will complete all assigned readings.
- StudylAssignments. I will spend a minimum of 1 hour per day reviewing notes and working on assignments.
- Course Help. I will attend instructor office hours at least once per week.
- Group Project. I will communicate at least weekly with peers in my work group (face-to-face or electronically) about our shared course project. actions that the instructor agrees to undertake to support the student. For example, the contract might state that the instructor will respond within 24 hours to course questions emailed by the student or will check weekly and alert the student to any missing course work. Listing teacher responsibilities on the contract emphasizes that success in the course is a shared endeavor and can prod the student to take advantage of instructor supports that might otherwise be overlooked.
- Sign-Off. Both student and teacher sign the learning contract. If the parent is participating in the development of the contract, he or she also signs the contract. Because this document is a kind of 'promissory contract' (Rousseau \& Parks, 1993), the student signature in particular indicates a voluntary acceptance of the learning contract and a public pledge to follow through on its terms.

Tips for Use. Here are additional ideas for using learning contracts:

- Contracts and Whole-Group instruction. If a number of students in a class would benefit from learning contracts as a motivational tool, teachers can incorporate them into whole-group instruction. For example, an instructor may write a series of learning-contract goals on the board (similar to the list appearing in Figure 1) and direct each student to select 3 or 4 to include in his or her own contract. The teacher would collect copies of all learning contracts and hold every student accountable for their use.
- Contracts \& Enrichment. Learning contracts can also be a convenient way to document individualized plans for enriched instructional activities. Advanced students can fill out contracts detailing their ambitious, self-directed learning goals; these contracts can also describe extra credit or other forms of recognition that students will earn for these enrichment activities.


## References

Frank, T., \& Scharff, L. F. V. (2013). Learning contracts in undergraduate courses: Impacts on student behaviors and academic performance. Journal of the Scholarship of Teaching and Learning, 13(4), 36-53.

Greenwood, S. C., \& McCabe, P. P. (2008). How learning contracts motivate students. Middle School Journal, 39(5), 13-22.

Rousseau, D. M., \& Parks, J. M. (1993). The contracts of individuals and organizations. Research in Organizational Behavior, 15, 1-43.

1 am taking part in this learning contract because the strategies listed here will help me to learn the material and perform well in this course.

Student Responsibilities
I have chosen to complete the following actions:
$\square$
1 [0
2
$\square$
3
[
4
-
-

## Teacher Responsibilities

My teacher will help me to achieve success in this course through these actions/supports:
1.]
2.
3.
4.
[0

## Length of Contract

[ 0 The terms of this contract will continue until:

```
|
```

[

Sign-Offs
[Student Name]
Student
[Parent Name]
Parent

## Troy Blue's Learning Contract

I am taking part in this learning contract because the strategies listed here will help me to learn the material and perform well in this course.

## Student Responsibilities

I have chosen to complete the following actions:

1
I will be on-time for class.
2
I will turn in at least $80 \%$ of assigned homework, with all work completed.

3
I will spend a minimum of 1 hour per day reviewing notes and working on assignments.
4
I will check in with the instructor during his free period at least once per week and bring any questions from current work.

## Teacher Responsibilities-

My teacher will help me to achieve success in this course through these actions/supports:

1. Answer questions and offer help during weekly free-period check-ins.
2. Remind Troy weekly about any missing assignments.
3. Supply review copy of class notes each period.

## Length of Contract

The terms of this contract will continue until:
My Algebra course grade rises to 75 or higher.

Sign-Offs


Mr. Smith
Teacher

7 roy Blue

Troy Blue
Student

Diane Blue

Diane Blue
Parent

## Reading Comprehension: Retain Text Information With Paraphrasing (RAP)

Students who fail to retain important details from their reading can be taught a self-directed paraphrasing strategy.
The student is trained to use a 3-step cognitive strategy when reading each paragraph of an information- text passage:

1. READ the paragraph;
2. ASK oneself what the main idea of the paragraph is and what two key details support that main idea;
3. PARAPHRASE the main idea and two supporting details into one's own words.

This 3-step strategy is easily memorized using the acronym RAP (read-ask-paraphrase).
OPTIONAL BUT RECOMMENDED: Create an organizer sheet with spaces for the student to record the main idea and supporting details of multiple paragraphs to be used with the RAP strategy. RAP organizer forms can provide structure to the student and yield work products that the teacher can collect to verify that the student is using the strategy.

## Read-Ask-Paraphrase (RAP) Sheet



Student Directions: For each paragraph from your assigned reading, (1) READ the paragraph; (2) ASK yourself what the main idea of the paragraph is and what two key details support that main idea; (3) PARAPHRASE the main idea and two supporting details in your own words and write them in the blank provided.

## Paragraph 1

## Paragraph 2

## Paragraph 3

## Paragraph 4

## Paragraph 5

## Paragraph 6

## Paragraph 7

## Paragraph 8

## Paragraph 9

## Paragraph 10

## Comprehension: Self-Management:

Reading Comprehension: Reading Actively (Gleason, Archer, \& Colvin, 2002).
By reading, recalling, and reviewing the contents of every paragraph, the student improves comprehension of the longer passage. The instructor teaches students to first read through the paragraph, paying particular attention to the topic and important details and facts. The instructor then directs students to cover the paragraph and state (or silently recall) the key details of the passage from memory. Finally, the instructor prompts students to uncover the passage and read it again to see how much of the information in the paragraph the student had been able to accurately recall. This process is repeated with all paragraphs in the passage.

Gleason, M. M., Archer, A. L., \& Colvin, G. (2002). Interventions for improving study skills. In M. A. Shinn, H. M. Walker \& G. Stoner (Eds.), Interventions for academic and behavior problems II: Preventive and remedial approaches (pp.651-680). Bethesda, MD: National Association of School Psychologists.

## Comprehension: Self-Management:

Reading-Reflection Pause: When reading, the student takes brief breaks periodically to consolidate understanding. INTERVENTION: During independent reading, the student is taught to follow these steps:

STEP 1: The student chooses a reading interval to follow (e.g., every four sentences; every 3 minutes; at the end of each paragraph).

STEP 2: At the end of each interval, the student pauses briefly to recall the main points of the reading just completed. If the student has questions or is uncertain about the content, the student rereads part or all of the section just read. Then the student resumes reading until the next interval is completed and repeats the reflection-pause.

Hedin, L.R., \& Conderman, G. (2010). Teaching students to comprehend informational text through rereading. The Reading Teacher, 63(7), 556-565.

## Comprehension: Annotation:

Link Pronouns to Referents reinforces understanding of an informational passage by replacing pronouns with their referent nouns during independent reading.

PREPARATION: Before each session:
Select an informational passage at the student's instructional level suitable for independent reading.
INTERVENTION: During independent reading, the student is taught to follow these steps:
STEP 1: While reading, the student circles each pronoun appearing within the text, locates that pronoun's referent (i.e., the noun that it refers to), and writes next to the pronoun the name of its referent. For example, the student may add the referent to the pronoun "it" in this sentence from a biology text: "The Cambrian Period is the first geological age that has large numbers of multi-celled organisms associated with it [Cambrian Period]".

STEP 2: The student reads the text at least once more. In this rereading, whenever the student encounters a circled pronoun, they consciously substitute that pronoun's referent.

## Comprehension: Annotation:

Mark It/Jot It prompts the student to interact with informational passages by marking up and annotating text. During independent reading assignments, the student reads each paragraph closely and follows these 2 steps:

STEP 1: MARK IT. The student uses this simple annotation system to mark up elements of the paragraph that they find meaningful:
! = This is an important point.
? = I have a question or confusion about this point.
Circled word(s) = I do not know the meaning of this term.
Underlined word(s) = This information is important.
Highlighted words $=$ This information is important.
STEP 2: JOT IT. The student writes notes in the margin of the text as appropriate to accompany the annotations, to include:

Question: e.g., "I have a question about..."
Clarify: e.g., "What does [term] mean?"
Connect: e.g., "This section made me think about..."
Comment: e.g., "I think that..."
Mariage, T.V., Englert, C. S., \& Mariage, M. F. (2020). Comprehension instruction for Tier 2 early learners: A scaffolded apprenticeship for close reading of informational text. Learning Disability Quarterly, 43(1), 29-42.

## Comprehension: Annotation:

Double-Entry Reading Journal prompts students to select relevant quotes from their reading and then write reflective comments.

PREPARATION: Before the intervention:
Format a double-entry journal log sheet. At the top of the sheet, include labels and spaces to record "Student Name", "Date" and "Name of Reading Assignment". Divide the sheet into 2 columns with a dividing line down the middle. At the top of the left column, insert "Passage from My Reading". At the top of the right column, insert "My Thoughts about This Passage".

Create a lookup sheet with a short list of reflective sentence-starters like these examples: This reminds me of
$\qquad$ .IThis makes me think of $\qquad$ .This is important because $\qquad$ ./I think this means $\qquad$ ./The reason I picked this is $\qquad$ .What confuses me about this is $\qquad$ ./This is interesting, because $\qquad$ ./Somebody who reads this might believe that $\qquad$ _.

Before each intervention session, select an informational passage within students' instructional level for use with this strategy.

INTERVENTION: During the intervention session:
STEP 1: Students receive a copy of the double-entry journal log and the assigned reading.
STEP 2: Students complete the reading, recording their selected quotations under column 1 "Passage from My Reading".

STEP 3: For each quotation, students write commentary notes. They are encouraged to consult their list of reflective sentence-starters if needed.

TIP: To motivate, you can conference with students prior to their reading and prompt them to set a goal for the minimum number of quotations from the text that they plan to select. You can then briefly check in at the end of the reading to view double-entry journal entries and verify that the students achieved their goals.

Poch, A.L., \& Lembke, E.S. (2018). Promoting content knowledge of secondary students with learning disabilities through comprehension strategies. Intervention in School and Clinic, 54(2), 75-82.

## Double-Entry Reading Journal

Student: $\qquad$ Date: $\qquad$
Reading Assignment: $\qquad$

| Passage from My Reading | My Thoughts About This Passage |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Sentence Starters: This reminds me of $\qquad$ .
This makes me think of $\qquad$ _. This is important because $\qquad$ I think this means $\qquad$ . -

The reason I picked this is What confuses me about this is _. This is interesting, because
$\qquad$
$\qquad$
Somebody who reads this might believe that $\qquad$ .

## Comprehension: Activating Prior Knowledge:

An Anticipation Guide is a brief series of statements about the text content that the reader answers prior to reading the assigned text. Here is a sample Anticipation Guide Item drawn from a living-sciences article about jellyfish as efficient predators:
**[ ] Agree [ ] Disagree | Jellyfish are as successful as finned fish in catching prey in the open ocean..*
PREPARATION: To prepare a student Anticipation Guide,
Select an informational text to assign as a class reading.
Review the text and highlight the most important general ideas that students should retain from the reading.
From these highlighted ideas, compose a short series of sentences (typically 5-7 items) written as factual statements. Based on the article content, some of the statements should be true and others false. Next to each, include a forcedchoice answer format (e.g., [] Agree [] Disagree).

INTERVENTION: During instruction:
STEP 1: Hand out the current Anticipation Guide.
STEP 2: Give students an appropriate amount of time (e.g., 5 minutes) to read through and answer Anticipation Guide items. [Optional: Review answers as a class and use the discussion to more fully activate student knowledge of the topic to be covered in the upcoming assigned reading.)

STEP 3: Hand out the assigned informational text for students to read as an in-class or homework assignment.
STEP 4: After reading the assignment, direct students to revisit their answers on the Anticipation Guide and decide whether they would change any responses based on what they have read.

TIP: Anticipation Guide (AG) items are designed to activate prior knowledge and engage students in the topic. When writing them, follow these suggestions:
-Focus AG items on the handful of key general ideas or facts that students should retain after reading the informational text.
-Construct AG statements using familiar terms to help students access their own topic knowledge. Based on an article discussing the dating of rocks using mineral isotopes, for example, you might write an AG item that links radioactive decay to the more-familiar organic decay: **[ ] Agree [] Disagree | Rocks decay over time just as animals and plants do.**
-When possible, craft AG statements that are likely to challenge students' initial assumptions, as this dissonance between assumption and fact can elicit interest and lead to deeper understanding.

Duffelmeyer, F. A. (1994). Effective Anticipation Guide statements for learning from expository prose. Journal of Reading, 37(6), 452-457.

## Comprehension: Cooperative Learning:

Partner Retell builds students' ability to summarize and recall main ideas from assigned readings.
PREPARATION: Before each session:
Select a short informational passage (e.g., 1 paragraph) at students' instructional level.
INTERVENTION: During this intervention:
STEP 1: Divide students into pairs, handing out copies of the selected passage to all pairs.
STEP 2: Direct students to read the passage. NOTE: Each student can read the selection independently or one student can read aloud to their partner.

STEP 3: A student in each pair is assigned the role of 'reteller' and the partner is appointed as 'listener'. During a 1-2 minute discussion, the reteller recounts the main idea to the listener, who can comment or ask questions.

STEP 3: Bring the class together and, with student input, summarize the passage main idea and write it on the board.
STEP 4: Direct student pairs to resume their work: The reteller is to locate two key details from the reading that support the passage main idea and share these with the listener.

STEP 5: At the end of the activity, conduct a spot check by randomly calling on one or more students in the listener role and asking them to recap what information on key details was shared by their reteller.

Carnine, L., \& Carnine, D. (2004). The interaction of reading skills and science content knowledge when teaching struggling secondary students. Reading \& Writing Quarterly, 20, 203-218.

## Comprehension: Cooperative Learning:

Collaborative Strategic Reading (CSR) guides students through the reading timeline (pre-reading, reading, postreading) in a supportive, cooperative-learning format. It can be used with student pairs, small groups, or an entire class.

PREPARATION: To prepare for the intervention:
Create a paper-based or digital learning log in which reading pairs/groups will record key learning from each session.
Make a "clunk card" for reading pairs/groups to use as a guide when fixing reading errors (see below).
Before each intervention session, select an informational passage of several paragraphs within students' instructional range.

INTERVENTION: During the intervention session:
Divide students into pairs or small groups. If possible, group heterogeneously by reading skill. Teach pair/groups to follow this 4-step reading process independently:

STEP 1: Preview. To preview the text, students:
-Discuss the general topic of the assigned passage.
-Look over the passage headings, illustrations, tables, etc., and sharing predictions about what they expect to learn from the reading.

STEP 2: Click and Clunk. Students take turns reading sections of the passage aloud. While reading, they monitor their "clicking" (successful understanding of the content) and "clunking" (encountering barriers to understanding such as difficulty with decoding or unknown vocabulary). When clunks occur, readers record them in the group learning log. They then use fix-up strategies listed on a "clunk card" to attempt to fix the presenting obstacle. Here are examples:

- I reread the clunk segment at a slower pace.
- I focus my full attention on what I am reading.
- I read the sentences before and after the clunk for clues about its meaning.
- I reread the sentence without the clunk to see what word-meaning might make sense.

STEP 3: Get the Gist. For each paragraph, reader and peer(s) identify, discuss, and paraphrase the main idea (gist). These gist statements are recorded in the learning log. Students summarize the main idea in around 10 words or less by answering 2 questions:

- Who or what is the paragraph about?
- What is the most important information shared about the who or what?

STEP 4: Wrap-Up. At the conclusion of the reading, students review their series of gist statements to summarize key information presented in the passage. They then generate several 'W-H' questions (e.g., Who?, What?, Where?, When?, Why?, How?) that are answered by the passage. These wrap-up questions are recorded in the learning log.

Vaughn, S., Chard, D. J., Bryant, D. P., Coleman, M., Tyler, B., Linan-Thompson, S., \& Kouzekanani, K. (2000). Fluency and comprehension interventions for third-grade students. Remedial and Special Education, 21(6), 325-335.

## How To: Promote Acquisition of Math Facts or Spelling Words Using Cover-Copy-Compare

DESCRIPTION: In this intervention to promote acquisition of spelling words or math facts, the student is given a sheet with a set of target spelling words or math facts and answers. The student looks at each original spelling word or math-fact (equation and answer), covers the spelling word or math fact briefly and copies the item from memory, then compares the copied spelling word or math fact and answer to the original correct model (Skinner, McLaughlin \& Logan, 1997).

GROUP SIZE: Whole class, small group, individual student
TIME: Variable up to 15 minutes per session

## MATERIALS:

- Worksheet: Spelling or Math Cover-Copy-Compare (attached)
- Log: Mastered Spelling Words or Math-Facts (attached)

INTERVENTION STEPS: Here are the steps of Cover-Copy-Compare for spelling words or math facts:

1. [Teacher] Create a Cover-Copy-Compare Spelling List or Math-Fact Sheet. The teacher selects up to 10 spelling words/math facts for the student to work on during the session and writes those items as correct models (math facts are copied with both equation and answer) into the left column ('Spelling Words' or 'Math Facts') of the appropriate Cover-Copy-Compare Worksheet (attached). The teacher then pre-folds the sheet using as a guide the vertical dashed line ('fold line') bisecting the left side of the student worksheet.
2. [Student] Use the Cover-Copy-Compare Procedures. During the Cover-Copy-Compare intervention, the student follows these self-directed steps for each spelling word or math fact:

- Look at the spelling word or math fact with answer that appears in the left column of the sheet.
- Fold the left side of the page over at the pre-folded vertical crease to hide the correct model ('Cover').
- Copy the spelling word or math fact and answer from memory, writing it in the first response blank under the 'Student Response' section of the Cover-Copy-Compare worksheet ('Copy').
- Uncover the correct model and compare it to the student response ('Compare'). If the student has written the spelling word/math fact and answer CORRECTLY, the student moves to the next item on the list and repeats these procedures. If the student has written the spelling word/math fact and answer INCORRECTLY, the student draws a line through the incorrect response, studies the correct model again, covers the model, copies the model again from memory into the second response blank under the 'Student Response' section of the sheet, and again checks the correctness of the copied item..
- Continue until all spelling words or math facts on the sheet have been copied and checked against the correct models.

3. [Teacher] Log: Items Mastered by Student. The teacher should formulate an objective standard for judging that the student using Cover-Copy-Compare has 'mastered' an individual spelling word or math fact (e.g., when the student is able to copy a spelling word or math fact plus answer from memory without error on three successive occasions). The teacher can then apply this standard for mastery to identify and log items mastered in each session, using the appropriate Log Sheet (attached).

## References

Skinner, C. H., McLaughlin, T. F., \& Logan, P. (1997). Cover, copy, and compare: A self-managed academic intervention effective across skills, students, and settings. Journal of Behavioral Education, 7, 295-306.

Worksheet: 1 Cover-Copy-Compare student:


## Log: Mastered Math Facts



Worksheet:'Cover-Copy-Compare student:

| Spelling Words | Student Response |
| :---: | :---: |
| 1. | 12. |
| I | 1b. |
| 2. | 2 a. |
| $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | 2 b . |
| 3. | $3{ }^{\text {a }}$ |
| $\begin{aligned} & \hline 1 \\ & 1 \\ & \hline \end{aligned}$ | 3 b. |
| 4. | 4a. |
| $\begin{aligned} & \hline 1 \\ & 1 \\ & \hline \end{aligned}$ | 4b. |
| 5. | 5a. |
| $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | 5b. |
| 6. | 6 a. |
| - | 6b. |
| 7. | 7a. |
| i | 7b. |
| 8. | 8a. |
| i | 8b. |
| 9. | $9{ }^{\text {a }}$ |
| 1 | 9 b. |
| 10. | 10a. |
|  | 10b. |



