

Intervention Name: Cover, Copy, and Compare

Common Core State Standards Domain Areas: (check all that apply)

Counting and Cardinality (K)	Operations and Algebraic Thinking (K-5)	Numbers and Operations in Base Ten (K-5)	Numbers and Operations – Fractions (3-5)	Measurement and Data (K-5)	Geometry (K-HS)	Ratios and Proportional Relationships (6-7)	The Number System (6-8)	Expressions and Equations (6-8)	Statistics and Probability (6-HS)	Functions (8-HS)	Number and Quantity (HS)	Algebra (HS)	Modeling (HS)
	X	X					X	X			X		

Setting: (check all that apply)

Whole-class	Small-group	Individual
	X	X

Focus Area: (check all that apply)

Acquisition	Fluency	Generalization
	X	

Function of Intervention:

Cover, Copy, and Compare is an approach to building fluency with basic facts and computation. A student looks at a solved mathematics problem, *covers* it, *copies* and solves it, and then *compares* to see if the newly-written problem matches the original problem. Cover, Copy, and Compare only takes a few minutes to complete, and students can use the practice every day.

Brief Description:

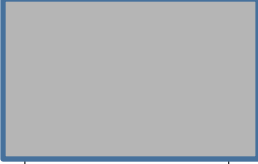
Cover, Copy, and Compare occurs in five steps.

- The teacher creates a Cover, Copy, and Compare sheet for the student. Typically, a sheet contains 10 problems. The problems should cover material the student needs to practice. For example, if the student is working on building fluency with multiplication facts, the teacher might create a sheet with 10 multiplication facts. The mathematics problems should always be typed or written with the answer. Students will work on the Cover, Copy, and Compare sheet one problem at a time.

$\begin{array}{r} 9 \\ \times 4 \\ \hline 36 \end{array}$	
$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$	
$\begin{array}{r} 7 \\ \times 5 \\ \hline 35 \end{array}$	

- The student looks at a problem. Some teachers encourage the student to read the problem aloud or silently.

3. The student covers the problem with an index card.
4. The student copies the entire mathematics problem with answer to the right of the covered problem.

	$\begin{array}{r} 9 \\ \times 4 \\ \hline 36 \end{array}$
$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$	

5. The student lifts up the index card and compares their copy to the original. If the student's copy is incorrect, they repeat the Cover, Copy, and Compare procedure for the incorrect problem until answered correctly.

$\begin{array}{r} 9 \\ \times 4 \\ \hline 36 \end{array}$	$\begin{array}{r} 9 \\ \times 4 \\ \hline 36 \end{array}$
$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$	

Procedures:

- **Duration:** Students work for a short amount of time (3-10 minutes). Time varies depending upon the difficulty of mathematics problems.
- **Teacher training:** Teachers must be familiar with the Cover, Copy, and Compare method. Teachers must produce sheets for student use. Many prepared sheets, however, can be downloaded from the internet.
- **Instructional practices:** Teachers should introduce the Cover, Copy, and Compare method and monitors the student as he/she works. Students can use Cover, Copy, and Compare on their own once they are familiar with the method.
- **Monitoring system:** Teachers can use Cover, Copy, and Compare information as a type of progress monitoring. Teachers can also use information as an error analysis for student mistakes.

Critical Components (i.e., that must be implemented for intervention to be successful): Teachers must choose mathematics problems appropriate for the student, prepare students to use Cover, Copy, and Compare, and monitor student work.

Critical Assumptions (i.e., with respect to prerequisite skills): Students work on problems for building fluency (e.g., addition, subtractions, multiplication, division, improper fractions, equivalent fractions)

Materials:

1. Cover, Copy, and Compare sheet
2. Index card
3. Pencil

References:

- Codding, R. S., Burns, M. K., & Lukito, G. (2011). Meta-analysis of mathematics basic-fact fluency interventions: A component analysis. *Learning Disabilities Research and Practice, 26*, 36-47.
- Grafman, J. M., & Cates, G. L. (2010). The differential effects of two self-managed math instruction procedures: Cover, copy, and compare versus copy, cover, and compare. *Psychology in the School, 47*, 153-165. doi:10.1002/pits.20459
- Joseph, L. M., Konrad, M., Cates, G., Vajcner, T., Eveleigh, E., & Fishley, K. M. (2011). A meta-analytic review of the cover-copy-compare and variations of this self-management procedure. *Psychology in the Schools, 49*, 122-136. doi:10.1002/pits.20622