Principle 2
EQUIPMENT and MATERIALS

- Computer with PowerPoint (PPT) or Overhead projector and screen
- Transparencies W2-1 to W2-13 or Writing PPT
  Optional: blank transparencies and pens
- Handouts W-7 to W-9
- VHS video player and TV/monitor for Videotape: ECR 3-5 Writing Module
  - Newsprint, markers, masking tape
  - 10 blocks for demonstration
  - 1/2-inch to 1-inch crayons or chalk for each participant (broken old crayons will work fine!)
  - Lacing card and yarn (see Supplemental Trainer Materials: cut out pattern; punch holes as shown)
  - Pencil to demonstrate grip

TRAINER NOTES

Training Time Total: 5 hours (approximate)
- Principle 1: approximately 2 hours
- Principle 2: approximately 1 hour and 30 minutes
- Principle 3: approximately 1 hour and 30 minutes

Participants Need to Bring...
An activity to develop fine motor skills. Have them explain how to do the activity with children during the discussion on fine motor activities.

Occupational Therapist
It is highly recommended that trainers contact the local AEA occupational therapist (OT) to train this section. A list of Area Education Agency (AEA) phone numbers to contact OTs is included in the Supplemental Trainer Materials. Please contact the OT at your AEA for information on Handwriting Without Tears, motor skill development, and related information.

Manipulatives
Bring manipulative objects to demonstrate fine motor skills for writing strategies. Set up tables with a few manipulative objects for participants to examine.

Video
A video is available to assist with this module. The video provides examples of developmentally appropriate activities which lead to writing skill development. (See Supplemental Training Materials.)

Homework Assignments
The homework review is the beginning activity for Principle 2. It may not be appropriate to conduct this homework review if there was not a break greater than one week between training sessions for Principles 1 and 2. If this is the case, conduct the homework review at a later time.

HOW TO USE THIS GUIDE
Symbols shown above will appear in the left column of the Trainer’s Script when an indicated item should be used. Trainer Actions also appear in the left column. Text in the right column of the Trainer’s Script provides the content to share with participants.
Welcome participants

Display PPT or Transparency W2-1

Display PPT or Transparency W2-2

Please find your peer partner and then form a group of four with another pair. You will have 10 minutes to discuss your homework and Handouts W-5 and W-6.

Focus on what you learned from completing these two homework assignments. Select someone to be the reporter. At the end of 10 minutes, we’ll ask you to report some things you learned to the large group.

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As mentioned previously, three principles have been selected for the Writing Module to assist parents and teachers in getting children ready to read. We just reviewed the first principle, which was *children need to develop an awareness of print.*

The second principle is...

*Children need to develop fine motor hand skills for writing.*

At the end of this principle, it is expected that you will have an understanding of how children develop fine motor hand skills and be able to:
- Match fine motor activities to ages and developmental stages so that children are supported in their level of fine motor development.
- Add three or more new activities and a variety of materials to the environment that will encourage fine motor development in children.
- Model and demonstrate fine motor tasks to allow children to see how materials are used.
The Iowa Early Learning Standards include:

Children develop small (fine) motor skills.

Children engage in early writing experiences.

The benchmarks for the Writing Module Principle 2 are:

- Children use hand-eye coordination to perform self-help and fine motor tasks with a variety of manipulative materials.
- Children experiment with writing tools and materials.
- Children show skills in using scissors and writing tools for various learning activities.

Let’s begin the second writing principle.

As children develop an awareness of print and see adults writing, they soon learn that writing is an important way to communicate. Writing a list helps mom or dad remember to buy things at a store. Getting a birthday card in the mail is a fun way to hear from grandma or grandpa.

Children naturally begin to experiment with and engage in writing because they are great imitators of adults.

In fact, if left unsupervised, children will often show their interest in writing by decorating the walls, the doors, the floor, or the cabinets.

As adults, we are fairly skilled at writing and forget the work it took to develop handwriting skills. Writing is a physical act that requires fine motor skills and control of the fingers.
Young children’s muscle control is still developing between three to six years of age, particularly those fine motor skills in the hands and fingers. Children are developing the muscles in their hands which will enable them to perform complex tasks requiring fine dexterity and manipulation. These skills are called in-hand manipulation skills. In-hand manipulation skills occur when a child can manipulate an object from palm to fingers. For example, putting coins in a bank or smoothly pushing a lace through a bead.

Research indicates that children with inefficient in-hand manipulation skills are slower and lack dexterity for tasks such as handwriting.

In addition, during the sensorimotor years, it is critical that children experience sensory play. Sensory play means giving children opportunities to touch and feel all types of objects and things. This helps to develop children’s kinesthesia system, the input from muscles and joints, which provides them sensory awareness of their body and hands.

As an example, select 5 objects (pencil, key, golf ball, etc.) and put in sack.

Ask volunteer to put hand in sack without looking, feel an object, and name it.
TRAINER’S SCRIPT

Research has shown that difficulty with kinesthesia skills is a good predictor of poor coordination and handwriting. These children typically have to watch their hands as they use them since the sensory input received from them is poor. Generally, children with poor sensorimotor skills in their hands perform fine motor skills very slowly. These children have difficulty holding their pencils because they lack fine dexterity skills. You can assist them by teaching in-hand manipulation skills as well as by demonstrating the following mature grasp.

Place your pen or pencil on the table. Pinch the pencil between your thumb pad and the index finger pad. Pick up the pencil, and, with your other hand, rotate the eraser down and up until it leans against your hand. The eraser should point back to the right/left shoulder (depending on hand preference). The pencil may be stabilized with the middle finger.

Do you have to grasp a pencil or pen like this? No, but it is the most efficient way to grasp a writing tool for ease and quickness of writing.

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Formal handwriting instruction, or directly teaching printing letters of the alphabet, is not considered appropriate in early childhood settings. Direct teaching does not occur until kindergarten or first grade.

The role of the adult is to help children three to five years of age develop fine motor skills so that, later, they will be able to print letters and use writing as a method of communicating.

We will use two strategies to help children develop fine motor skills:
- First, adults need to provide a variety of small manipulative objects and activities for children to develop fine motor skills.
- Second, adults need to model and demonstrate fine motor skills.

Watch this video clip for examples of activities that can be used to develop fine motor skills. Notice the variety of materials the adults provide for children.
As we discuss the strategies for this principle, think back to the video.

At the beginning of this module, we talked about the stages and skills of writing (sensorimotor, scribbling, and writing first words). We’re going to link back to the first stage of development, sensorimotor, and talk about how children can develop fine motor hand skills, particularly in-hand manipulation skills.

Using the first strategy, adults need to provide a variety of small manipulative objects and engage children in many fine motor play activities. This helps children develop the fine motor skills needed for later writing.

Examples of play that develop in-hand manipulation skills include any game, toy, gadget, or object that involves manipulation. For example, small plastic figurines (especially those with movable arms and legs), blocks, Lincoln Logs, Duplos, or Bristle Blocks.

Activities that develop in-hand manipulation skills include lacing cards, stringing beads or macaroni, rolling dice and moving tokens for board games, card games, tearing paper to make pictures, using tweezers, or rolling play dough.

Also, don’t forget to use self-care skills to practice in-hand manipulation skills. Children learn pencil grasp from the way they use silverware. Using silverware at least two times weekly to eat a snack is an easy way to add practice of in-hand manipulation skills.

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Sensorimotor play includes finger-painting, playdough, water play, sand play, climbing, and crawling.
You may have many of these objects in your environment, but that is not enough. That is where the second strategy is implemented.
Using the second strategy, adults may need to model or demonstrate fine motor skills by manipulating a variety of small objects and engaging children in many fine motor play activities.
A model or demonstration may not be needed for all children every time. However, describing how to manipulate the object to children provides another opportunity to model language with a fine motor skill.
Lacing cards or stringing beads or macaroni may be examples the adult would want to model and explain to children.

Lacing is a simple activity but often needs to be demonstrated to children. This is a simple shape to lace.
Tie one end of the yarn to the shape and wrap tape around the other end. That makes it easier to lace. You may show children a simple straight stitch. Tell children, “The end of the yarn goes down the hole and up the next hole. Down and up. You try it.”

Facilitator should model how to lace a card
See Supplemental Trainer Materials for a pattern

...continued...
TRAINER’S SCRIPT

You may show children the casting stitch. Tell children, “The end of the yarn goes over the edge and up the next hole, over the edge and up the next hole.”

Lacing is an activity that involves modeling of vocabulary (direct teaching of the words up, down, next, or over) and fine motor hand skills (pinching the yarn). It is a wonderful activity to have children try, and it is fun. Many different shapes can be laced for different learning activities.

As a large group, let’s brainstorm objects or activities children could use to develop their fine motor skills for sensory motor play or in-hand manipulation skills. If you brought ideas for activities, now is a good time to share those.

Don’t forget to consider the size of objects for very young children to play with, since some items are small and could lodge in a child’s throat. Think of kitchen utensils, foods you pinch or grasp to eat, toys on the shelves, etc.

I’ll record your ideas on newsprint. I’ll start with one example of an activity: putting index cards in envelopes in the Mailroom Center.

Thank you for your suggestions. Look at the number of different ideas you suggested to help children develop in-hand manipulation and fine motor skills!
This handout includes many ideas you mentioned plus some new ones. Take a few minutes now to review it.

Questions or comments?

The next stage of writing development we reviewed was scribbling.
Scribbling is fun writing that should be especially encouraged in children by adults.
Children, and many parents, need to be assured it is fine to write in a scribbling fashion. Scribbling is the beginning skill that leads to writing letters. It builds the background knowledge for writing first letters.
Scribbling is like an infant babbling. The infant must experience babbling before learning to form sounds in words.
Adults can provide different writing objects and activities for children to experience scribbling.
Writing in shaving cream, whipped cream, sand, or finger paint encourages all sizes of lines, squiggles, and marks.
Children should have lots of opportunities to work on vertical and slanted surfaces. Scribbling or writing on vertical or slanted surfaces such as chalkboards, easels, or paper taped to the wall, cabinets, or the refrigerator is developmentally easier than working on a flat surface.
Writing on chalkboards and easels is another fun way to scribble. Just a hint – provide small pieces of chalk about 1/2- to one inch long to encourage children to “pinch” the chalk. Erasing or drawing with a small 1/2-inch damp sponge also helps develop fine motor hand skills.
Adults need to model scribbling, as well as have other children in the classroom model scribbling. Most classrooms and families have fine scribblers! Using the second strategy of modeling, adults can describe scribbling tasks for children. The adult may say,

“Children, today you have a choice of writing with chalk on the chalkboard or writing using shaving cream on the table. You may want to try this short pink chalk. Look, I’m writing.” (Make big, tall, short, long scribbles.)

“If you chose shaving cream, you may use one finger, three fingers, or your whole hand to write. Watch how I write using one finger (scribble), three fingers (scribble), my whole hand (scribble).”

What other activities do you do with children that gives them opportunities to scribble?

The last stage of writing development we reviewed was writing first letters.
Writing first letters may begin as young as four or five years old.
Children’s fine motor hand skills are developed through experimenting with lines and shapes.

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Parents and teachers need to continue to provide opportunities and activities to encourage children making lines and shapes. Research indicates that good predictors for handwriting readiness are a child’s ability to draw a circle, cross, square, triangle, and an X. The curriculum Handwriting Without Tears, developed by Jan Olsen, occupational therapist, suggests that children should have the following skills to exhibit readiness to print:

- Established handedness
- Holds pencil in good writing position
- Identifies concepts big curve, little curve, big line, little line, and
- Demonstrates satisfactory level of attention, cognitive skills, and cooperation

There are many art activities for children to practice making lines and shapes. For example, using strings of yarn and texture shapes cut from material, shading or tracing textures with paper and crayons, or making lines and shapes with different types of paint brushes.

As children continue to explore and experiment by scribbling and producing their own writing, they usually begin to write actual letters of the alphabet or close approximations of them.
Learning to write letters is a very complex task. According to Schickedanz (1999), writing alphabet letters requires children's knowledge of the:

- Visual image of each letter (that is, knowing how each letter looks)
- Line segments used to form each letter (big line, little line, big curve, little curve)
- Sequences in which the lines are put together to compose the letter (start at the top, big line down, little line across the top, middle, and bottom)
- Direction in which to draw each of the lines (top to bottom, little circle on left or right of line)

Young children three to five years of age learn about these important rules of making lines and shapes for letters by watching adults. Writing letters is a complex task, and modeling writing of letters is extremely important. The strategy is to continuously model drawing letters and even talking aloud describing how the letter was drawn. The adult may say,

“Children, I'm writing the first letter of my name on this big paper. Watch this. First, I start at the top. Make a big line down. Then I put a little line on the bottom. That's the letter L.”

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In this activity, the adult is the only one doing the writing with a marker. The children are watching the adult and listening to the adult describe how to make letters. No demand is made on the child to follow the directions. The reason children are only watching and listening to the adult describing how to make letters is because children need many, many, many demonstrations before they learn to write first letters.

There is no demand that all children will have their pencils ready to imitate this model nor that the adult will correct handwriting. The child is looking and watching, taking in information. Those children ready to imitate will do so.

As you know, don’t expect precise first letters. Much praise should be provided for any attempt.

Writing first letters should be fun and rewarding.
Adults can provide models and examples of writing for children before, during, and after routine or special events that are meaningful to them. Writing can be easily demonstrated before reading a story by writing the title or author of the story on newsprint paper or a strip of paper.

During the story, writing may be modeled by the adult printing characters’ names on newsprint or tallying a sequence of events that occur. For example, the adult could tally the number of different foods the hungry caterpillar ate in the story The Very Hungry Caterpillar.

After the story, adults may write children’s favorite parts of the story or list the sequence of events in a story like Who Sank the Boat?

In this story, different animals get into a boat beginning with a cow, donkey, pig, etc. The adult could write the sequence of the animals that got into the boat on newsprint.

Of course, this activity as well as the others, should be done with the children providing the answers and the adult writing their suggestions. (After the story, children may draw pictures of the boat and animals.)

Please try one of these activities with your children. Which one would best fit the age of children you work with? How could any of them be adapted for the children you work with?
Distribute Handout W-9: *Practice/Reflection Log and Example: Fine Motor Hand Skills*

Break participants into three groups. Have each group read through one example. Give participants a few minutes to read. Discuss examples. As an additional writing assignment, trainers may assign these examples.

Display PPT or Transparency W2-12

Find your peer partner.

Think about the age and stage of development of children you work with. Each partner may emphasize a different age group and developmental area.
Each one of you will plan a writing activity.
If you are working with 3-year-olds, you can develop a lesson at the sensorimotor (gross or fine motor) stage of development.
If you are working with 4-year-olds, you can develop a lesson for fine motor skills and scribbling.
If you are working with 5-year-olds, you can develop a lesson for writing first words or a lesson from the motor skills.
Write and describe the objects and activities you would use in the left column of Handout W-9.
Then, decide what you will say or do to model the skills you want the children to develop. Write a script of what you will say to model the skills following the object or activity that you listed on Handout W-9.
For example, if the activity were stacking blocks, I would say and model:

“I’m stacking blocks to make a big tower. I need to hold the block with my thumb and fingers. See? (Show child your thumb and fingers holding the block.) I’m putting the big blocks on the bottom so my tower won’t fall over. I have to hold my hand steady as I put blocks on the top. The higher the tower, the more careful I must be! How tall is my tower? (Stand beside the tower and measure it to your leg.) My tower is as tall as my knee!”

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TRAINER’S SCRIPT

Ask children to make a tower, measure or compare the height, and draw a picture of their tall tower. (Some children could measure the height of the stack of blocks with a yard stick, find their name on a chart, and mark/color the height of their tower with a little adult help!)

In the date column, record the date when you actually do the modeling lesson. Do not fill that column in until after you have done the activity.

In the “What happened” column, write what you learned from the children’s responses and questions you may have had about what you did or what you learned. Fill this in after you have done the activity.

Again, these stages are not absolutes. Not all 5-year-olds are ready for writing. So, think about the children you will use this with and design a lesson that is appropriate for them.

You will have a total of 20 minutes. Take 10 minutes to plan each partner’s lesson. Work together. Try to come up with new ideas.

Questions or comments?

Please schedule one time when you can observe your partner modeling. You will need to do one observation.

Decide the date you will observe and write it on Handout W-9.

After 20 minutes, call group together
Now we will do some role-plays.

Each of you can take 5 minutes to role play your planned lesson. One partner should be the teacher and the other the child.

After one partner finishes his/her role play, the second partner should begin. You do not need to discuss how the role play went.

You will have 10 minutes to complete both roleplays. If you finish before the 10 minutes is up, write notes to yourself about how the role play went and what you want to remember when you use this activity with children.

Any questions about this principle?

The most important point of this strategy is that there are many opportunities every day to model a variety of meaningful fine motor experiences for children to develop fine motor skills.

Please practice the lesson you planned with children between now and __________ (date of next session).
On the last page of Handout W-9, write 3 objects or activities you could add to your environment between now and our next session. The objects and activities should be things your children could play with or do that would help them develop their fine motor skills. For example, you might ask children to tear pieces of paper for an art project or sort the Legos-and-peg storage bins.

Please add or try out the objects and activities with your children between now and our next class on _________ (date of next class).

In the right column, write how your children reacted to the new objects or activities. Did they like them? Ignore them?

Take about 5 minutes to complete the last page of Handout W-9 now. Please work individually.

You do not need to do a peer partner observation with these 3 objects or activities.

Bring your Practice/Reflection Log, Handout W-9, to the next class.

Questions?