

# Learning the Code

Learning the Code is a term that describes understanding the alphabetic principle. The alphabetic principle is the concept that

- Speech can be turned into print
- Print can be turned into speech, and
- Letters represent sounds in the language

Young children begin learning the code when they have experiences in three areas:

- Phonological awareness
- Alphabet Knowledge
- Connection between the written and spoken word

Learning the code is similar across languages at least for alphabetic languages. Preschoolers learning English, for example, have similar phonological awareness and alphabet knowledge skills in both languages (Tabors, Pérez & López, 2003). Phonological skills cross languages. i.e. If a child develops phonological awareness skills in Spanish, by learning Spanish chants, songs those skills will transfer to English. (Riccio et al, 2001)

## *Phonological Awareness*

**Phonological awareness** refers to the sensitivity to the ability to attend to the sounds of oral language.

- Words have important sound characteristics.
- The smallest units of sounds in words are called phonemes. These sounds can affect the meaning of words. E.g., changing one phoneme turns cat into bat.
- To learn to read children will eventually need to learn about the smaller units of sounds in words.
- At first children are aware of larger units of sounds (e.g., words and syllables).
- During Kindergarten and early grade-school period, children become sensitive to smaller and smaller units of sounds such as onset-rime (b-all) and phonemes (/b/).
- There are four basic sets of phonological awareness skills that are important for children birth-5 years. Children are not born with these skills but develop this awareness through certain experiences with language.

The following four skills represent a rough developmental continuum of the kinds of experiences young children would benefit from:

- Listening to and distinguishing environmental sounds
- Rhyming
- Alliteration (identifying and manipulating initial sounds)
- Segmenting (e.g. syllables)

## *Alphabet Knowledge*

**Alphabet knowledge** refers to gaining familiarity with the letters of a language. Children learn to:

- Identify features of letters that distinguish it from other letters
- Identify names of letters
- Associate sounds with letters

They also learn that the alphabet has a certain order. Letters are written down in a certain direction.

From birth, children are exposed simultaneously to both words and print.

## *Connection between the Spoken and Written Word*

During preschool, children progress toward a general understanding of the connection between print and spoken words, that print is spoken words written down.

# Development of Phonological Awareness And Alphabet Knowledge



## Infants and toddlers

- Children are interested in the sounds of oral language from birth on. By four weeks old, infants can discriminate among different sounds (phonemes).
- By 6 months, many infants repeat strings of speech sounds with similar rhythms and cadences as the language they hear spoken around them.
- Toddlers enjoy listening to songs and rhymes. They participate in finger plays and turn-taking games (Pat-A-Cade, Los Elefantos) and can repeat parts of songs and nursery rhymes.
- Toddlers first hear words as holistic sound units. As they learn new words, they begin to realize that some words may sound similar but mean different things (e.g., boy, toy). This helps them become aware of differences and similarities inside words of smaller segments of sound such as syllables and rimes.

## Preschoolers

- Preschoolers show interest not only in the meaning of words but also in how the words sound. They enjoy tongue twisters, play intentionally with parts of words changing sounds to invent new words.
- They can recite familiar nursery rhymes and songs. Many preschoolers recognize words that rhyme (me-three) and words that start with the same first sound (e.g., Ben-Bianca).
- Some preschoolers can blend and segment compound words (pea-nut, air-plane), blend syllables into words and segment words into syllables (can-dy).
- Older preschoolers may even be able to perform these skills at the level of phonemes.

## Alphabet Knowledge

### Infants and toddlers

- Infants and toddlers are surrounded by printed words and letters from birth. Infants are mostly interested in colors, shapes and size.
- Toddlers begin to notice letter names and sounds.
- They look at alphabet books, sing parts of the alphabet song, and play with letters (blocks, magnetic letters, letter stamps).
- Some may learn a few names and sounds (first letter of name), and may associate some letters with words ("M" for mommy).

### Preschoolers

- Preschoolers know some letter names.
- Some may also know that letters have sounds, say what sound they make and print their name.
- Older preschoolers begin to listen carefully to sounds in words. Some may even try to write words by matching prominent sounds in words (e.g. first and last sounds) with letters. These attempts to write words are called invented spellings

# Learning the Code - Checklist for Educators



*To help children develop sensitivity to sounds and awareness of print, educators can:*

- Have interesting print (e.g., posters, photographs, children's art) in the room
- Have a variety of children's picture books
- Encourage children to experience a variety of art and writing tools
- Model reading and writing
- Encourage children to sing songs and rhymes
- Talk with children about the sounds in words when singing songs and rhymes
- Emphasize rhyming words when reading books with text that rhymes
- Be sensitive to dialectal and language differences in how children may perceive and pronounce words and sounds

*To help children develop phonological awareness and alphabet knowledge, preschool teachers can:*

- Emphasize initial sounds of words when reading alphabet books and books with alliterative text
- Highlight the connection between written and spoken words by taking children's dictations
- Encourage children to write to help children make the connection between letters and sounds
- Become more aware of how children use decoding/encoding processes when they first learn how to read and write
- Be sensitive to children's exposure to different types of written scripts and print conventions

# **Learning the Code - Educators Supporting Families Checklist**



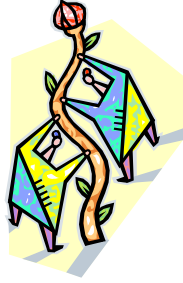
*To help young children develop sensitivity to sounds and awareness of print, educators can encourage families to:*

- Sing songs and rhymes with their children
- Talk with their children about the sounds in words when singing songs and rhymes
- Emphasize rhyming words when reading books with text that rhymes
- Sing alphabet songs
- Talk about print that their child is interested in
- Make their own children's books
- Encourage children to make marks using a variety of art and writing tools
- Encourage their children to play with plastic or foam letters, letters cut-out from cereal boxes, blocks with letters on them.
- Model reading and writing and talk about what they are doing
- Talk with their children in the language they are most comfortable with

*To help preschool children develop phonological awareness and alphabet knowledge, teachers can encourage families to:*

- Look at alphabet books, talk about the pictures and find words that start with the letter their child is interested in (e.g., the first letter in their child's name).
- Talk about letter names in books and environmental print their child is interested in.
- Encourage children to pretend to write their names and other words children are interested in using a variety of art and writing tools (e.g., crayons, paint, chalk, sticks, blocks, plastic letters, letters cut-out from cereal boxes).
- Go to the library with their child

# Supporting Phonological Awareness & Alphabet Knowledge: A Training Experience



## Activity:

Children experience words and print in everyday environments, like at the grocery store, at home or in their daycare setting.

- *Questions to Participants:* Can you think of any other places children would come into contact with words or print?
  - Take 4-5 different examples
- We Need to begin thinking about how to support:
  - Phonological awareness
  - Alphabet knowledge within these environments
  - These strategies can be used by parents and families to help children ‘Learn the Code’.

*Participants are divided into groups, one group for each “everyday environment” that you decide to delineate.*

Work within your group to:

- Develop strategies that parents and families can use in these everyday situations to support preschool children’s learning of phonological awareness and letter knowledge
- Provide tips for parents to extend an experience into a “teachable moment”  
For example – at the grocery store, your child points to your grocery list and you begin discussing what the words on it are; the teachable moment then is giving the child a pen and scrap paper and letting him make his own grocery list.

*Instruct the groups to select one member as the “recorder” who will create one list for the group, and one “reporter” who will report to the other groups during Share Back. Inform the teachers they have 20 minutes.*

## Share Back:

Each group’s reporter will:

- Let everyone know the “everyday environment” that was given to them
- Share the strategies they came up with
- Share the tips they came up with to extend experience into a teachable moment

*Chart ideas down for whole group to see.*

## Extension Discussion

- What else can we do in other everyday experiences to encourage phonological awareness and alphabet knowledge?
- How can we bring these strategies to parents and families?
- When and how is it appropriate for us as teachers to bring this to families to enrich their interactions with their children?

# Fostering an Understanding of Phonological Awareness and Alphabet Knowledge: A Training Experience



We are now going to do an activity that will help us think practically what experiences help young children to Learning the Code over the first five years of life.

The purpose of this activity is to:

- Help participants experience some ways to promote Learning the Code
- Discuss important points for developing and promoting “Learning the Code” experiences for children.

*Break the group into teams of 3 people.*

- *Group #1 Phonological awareness*
- *Group #2 Alphabet knowledge*
- *Group #3 Awareness of the connection between spoken and written sounds and words*

*A trainer (3 total) will each lead a group.*

## **Group #1 Phonological Awareness**

- Activity #1
  - Have several objects that sound somewhat similar but distinct from each other (so it will be fun but somewhat challenging for the participants e.g. shake several rattles, crumple several kinds of paper).
  - Make a sound behind a screen (so participants cannot see how the sound is produced.)
  - Ask a participant to guess what the sound is and to describe it. Repeat for 3-4 different sounds.
- Activity #2
  - Sing Las Tortillitas while clapping.
- Activity #3
  - Sing the Bumble Bee Chant  
Bumble bee, bumble bee,  
Will you say your name for me?  
(A participant calls out her/his name and the group says each syllable of the name and claps the name e.g. A-li-ci-a).
  - Repeat with 3 different names.

# Fostering an Understanding of Phonological Awareness and Alphabet Knowledge: A Training Experience

## Group #2 Alphabet knowledge

- Activity #1 – Read an alphabet book
  - Talk about the names of the letters and what they look like
- Activity #2 – Sing the Letter Hokey Pokey
  - Gather participants into a circle and pass out one card per participant
  - Each card has a letter card (one letter per card, about 3 cards for each letter)
  - Since the Hokey Pokey, only sing:  
“You put your letter “H” in  
You put your letter “H” out  
You put your letter “H” in and you shake it all about.  
You do the Hokey Pokey and you turn yourself around.  
That’s what it’s all about.”
- Activity #3 – Have a name card with letter stamps. Ask each participant to make a name card for their name tag using alphabet stamps.

## Group #3 Awareness of the connection between spoken and written sounds and words

- Activity #1 – “If you’re happy and you know it clap your hands.”
  - Ask participants to make suggestions for other ways of showing happiness besides clapping
  - Take 3-4 suggestions, writing the suggestions down on a flip chart
  - Then sing the song, using the suggestions
  - Point to each suggestion (and the words in the suggestion) as you lead the group singing each verse of the song
- Activity #2 – Word Wall
  - List some of the important words that have come through as important to you in this training
  - Ask for 6-8 suggestions and write the word each on a half sheet
  - Reorganize the words into columns by initial letter (e.g. family literacy, foundations grouped together, etc.) as you add more words to the word wall

## Large Group Summary:

*Finish up by restating the important points.*

- You have just finished sharing the three pieces of the alphabetic principle.
- Learning to read and write is dependent on children’s mastery of the alphabetic principle
  - The understanding that there are systematic and knowable relationships between sounds and letters allows children to apply these relationships to read fluently
- Children should be making progress by building skills in two areas of early literacy:
  - Phonological awareness, and
  - Alphabet knowledge
- Phonological awareness along with knowledge of letters has been found to be one of the most powerful predictors of later reading success (Whitehurst & Lonigan, 2001)

# Mastering Strategies Checklist

## **What is the Strategies Checklist for?**

The strategies checklist is a tool for caregivers, family members, home visitors, supervisory and administrative staff, and community partners to utilize to consider their own use of key techniques that support language and literacy in young children, and to help adults improve their levels of mastery of this skill.

## **How is the Strategies Checklist used?**

The checklist involves a 4-step process:

**Step 1** – Each person selects a strategy or strategies that will be the focus of the observation. These may be strategies that the person has already been working on or new ones that s/he wants to master. Since mastering a new strategy takes a good deal of time and energy, it is best that adult learners focus on a small number of strategies at a time until these have been mastered before tackling others.

**Step 2** – Individuals can view videotapes of their own interactions with children and mark the strategies they see themselves using. Supervisory staff can observe staff as they work with children and provide feedback about the strategies they saw in use. Family members can observe one another and provide similar feedback.

**Step 3** – The next step is to consider which level of master has been achieved at the time of the observation. Training is the first step in skill development but skills are only mastered after a good deal of practice. Researchers have found that there are a number of discrete steps to skill acquisition. This checklist uses the acronym MASTER to help clarify the levels of skill acquisition.

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**M – Making** the first move

- I know that there is something I need to do but I don't understand why or how to do it

**A – Aware** of new strategy

- Can imitate the strategy
- Don't see problems that might come up

**S – Successfully use** strategy in real settings

- Understand that there is more to learn about the strategy
- Know when I need more information

**T – Try** new ways to do it

- Understand a lot about the strategy
- Begin to internalize the skill

**E – Establish** skill through continued practice in a number of settings

- See the connection to multiple situations
- Still have to think about it to do it

**R – Ready** to go

- Automatically use the strategy when I should
- Continue to learn from others
- Now ready to teach others how to do it too

It is important to take the time to determine where one is on the mastery continuum in order to see and celebrate progress, keep practicing, and get feedback, ideas and suggestions from others. Children benefit most when adults have mastered the strategies they are using to promote beginning language and literacy. Once a strategy has been mastered, it is important to maintain it and continue to use it while moving on to master new ones.

In order to determine the level of mastery, the right side of the checklist should be completed by the person developing the skill in collaboration with the observer. Since skills develop one part at a time, it is possible to have some of the descriptors of a given level, but not all of them. In that case, the level of mastery is the highest one in which all the descriptors have been achieved.

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**Step 4** – The last section of the checklist is the place to record next steps.

**Is the Strategies Checklist a one-time thing?**

The purpose of the checklist is to provide a tool for continuous improvement. It should be used on a regular basis to enable staff and families to see how much progress has been made and to help lay out a map for further skill acquisition and mastery.

The Strategies Checklist is NOT a test, but a tool to support each SPARC Literacy participant master key techniques that support beginning language and literacy. It can be used at the individual, site, or program level. It can inform family members and professionals. It can help direct next steps for individuals, for classroom, or entire program training plans. It should also serve as a tool for documenting and celebrating progress.

**I know that to truly use the skill to benefit children the most I have to become really good at it, i.e. *MASTER* each strategy. How do I move from one level of mastery to the next?**

The best way to master any new skill is to practice-practice-practice. It takes time and commitment. This is the only way that real learning and change occur. There are some key activities to use to help one progress from one level to another, but they all include some form of practice.

People go away from training when a new strategy has been introduced at the M or the A level. Even if there is a time to practice during training, it is impossible to really understand and develop a skill while still at training. Some techniques that will help you at each step along the way to skill acquisition and mastery are listed in italics below.

A list like this may seem like learning a new skill is more of a big deal than it is. These steps will become automatic after a short time and you and your program will have made substantive steps toward living the principles of a learning organization.

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### **M** – Making the first move

I know there is something I need to do but I don't understand why or how

- *It's important to understand why any new strategy is worth learning. Ask others why it is important, what it will accomplish if you learn and use the strategy, what good it will be for children. Be able to tell yourself and others why you are going to work on this new strategy and why you want to be skilled at it.*
- *Discuss the new strategy with others. Go over what you understood it to be and see if they understood it the same as you did. Read any information you have about it.*
- *Try it a few times and see what happens.*
- *Talk with others about your experiences of trying it out.*
- *Keep working on it until you can imitate what you saw at the training or what you heard or read about.*

### **A** – Aware of new strategy

Can imitate the strategy

Don't see problems that might come up

- *Ask a colleague to watch you use the strategy and let you know if you are imitating it the way it was taught. (At this level, asking a colleague is better than watching yourself in a video because if you have misunderstood or forgotten something you will not be able to see the error.)*
- *Change what you are doing until your imitation of the strategy is correct.*
- *As you practice, think about how it is going, keep track of your questions and challenges, and talk about them with others. Everyone should develop questions and challenges; it is only time to worry if you are not experiencing some challenges.*
- *Incorporate the feedback you get into your next practice time.*

### **S** – Successfully use strategy in real settings

Understand that there is more to learn about the strategy

Know when I need more information

- *Continue practicing.*
- *Video tape yourself or ask someone you work with to observe you as you are working to incorporate the strategy into your day-to-day interactions with children.*
- *Make corrections based on input and what you observe about yourself.*

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- *Ask questions when you need to and act on the answers to the questions.*

**T** – Try new ways to do it

Understand a lot about the strategy  
Begin to internalize the skill

- *Experiment with ways to use the strategy*
- *Talk about the strategy with others and realize that you can explain things about it that your teacher did not tell you in the training.*
- *Continue to practice, think about what you are doing, ask others to provide you feedback and do the same for them.*

**E** – Establish skill through continued practice in a number of settings

See the connection to multiple situations  
Still have to think about it to do it

- *Continue to think about the strategy and remind yourself to use it as much as possible.*
- *Use the strategy in new places and in different circumstances where it is still appropriate.*
- *Continue to talk about it with others, receive feedback, and change according to the feedback.*

**R** – Read to go

Automatically use the strategy when I should  
Continue to learn from others  
Now ready to teach others how to do it

- *Once you have mastered a skill, you need to maintain it or it will go away.*
- *Continue to reflect on and discuss it with others every few weeks.*
- *Teaching others helps you maintain your skill. Teaching others before you have mastered a skill means you will only relay information at a superficial level.*
- *Now that you have mastered the skill, you can **teach because you know and understand.***

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## References

Kim, D.H. (1999). A strategy for building competence. In P.M. Senge, A. Kleiner, C.Roberts, R. Ross, G. Roth, & B. Smith (Eds.), *The dance of change*, pp. 133-136. New York Doubleday.

Cancer Prevention Research Center Transtheoretical Model: Stages of Change.  
<http://www.uri.edu/research/cprc/TTM/StagesOfChange.htm>

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## Strategy Observation Checklist

Use this checklist to identify strategies being used and provide feedback to the person being observed.

<b>Strategies</b>	<b>Specific Description of Activity</b>	<b>M</b>	<b>A</b>	<b>S</b>	<b>T</b>	<b>E</b>	<b>R</b>

M – Making the first move    A – Aware of new strategy    S – Successfully use strategy in real settings    T – Try new ways to do it  
 E – Establish skill through continued practice in a number of settings    R – Ready to go

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## Next Steps

Date: \_\_\_\_\_ Observation and Notes by: \_\_\_\_\_

Person being observed: \_\_\_\_\_

Based on this feedback the next area I want to focus on will be \_\_\_\_\_

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My next steps are to \_\_\_\_\_

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