



Data Analysis: Birth – Age 5

Office of Early Learning & School Readiness

Ohio | Department
of Education

Presenters

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Session Objectives

Review Ohio's Early Learning Assessment (ELA)

Consider data sources related to literacy to analyze, examine and interpret using the ELA

Engage in a root cause analysis

Practice developing narratives to support data analysis

Ohio's Early Learning Assessment



What is the Early Learning Assessment?



**Formative
assessment tool to
address school
readiness domains**



**Ohio's Early
Learning
Development
Standards**

Early Learning Assessment Domains



**Social
Foundations**

Mathematics

Science

Social Studies

Fine Arts

**Language &
Literacy**

**Physical Well-
Being & Motor
Development**

How does the ELA work?

1. Data is taken from observations completed by a trained teacher or early childhood professional.
2. Teachers use observations to rate a child's skills, knowledge or behaviors (SKB) in different domains.
3. The ratings for individual SKBs come together to create a learning progression score for each domain.



EARLY LEARNING ASSESSMENT

STUDENTS (6) GROUPS ACTIVITIES

ASSESSMENT OVERVIEW

DOMAINS/LEARNING PROGRESSIONS/
SKILLS, KNOWLEDGE, OR BEHAVIORS

	R	N	A	B	C	D	1	2	3	4	5
SKB											
1. Social Foundations / Awareness and Expression of Emot Emotion Identification	0	0	1	0	0	0	1	0	2	2	
2. Social Foundations / Awareness and Expression of Emot Response to Distressed Peer	3	0	0	1	1	0	0	1	0	0	
3. Social Foundations / Relationships with Adults Separation from Familiar Adults	3	0	0	0	0	0	2	1	0	0	
4. Social Foundations / Relationships with Adults Seeking Emotional Support	4	0	0	0	0	0	0	1	0	1	

Ratings/Scoring

PROGRESSION LEVELS										
A	B	C	D	1	2	3	4	5		
Developmental levels preceding Level 1				Approximately three years of age	Progress toward kindergarten entry		Approximately entry to kindergarten	Approximately end of kindergarten		

Not Scorable or Not Evident?



Language and Literacy

- Focus on children's language development
- Foundation for early literacy skills
- Speaking and listening, reading and writing

Language and Literacy

- 7 Learning Progressions
- 18 Skills, Knowledge and Behaviors (SKBs)



Learning Progressions

Story/Text Comprehension

Phonological Awareness

Phonics and Letter
Recognition

Communication

Emergent Writing

Grammar

Vocabulary

**Respond to
questions
about a text**

Retell a Text

→ Story/Text Comprehension

Phonological Awareness

Phonics and Letter
Recognition

Communication

Emergent Writing

Grammar

Vocabulary

Rhyming Words

**Syllables/Onsets
and
Rimes/Phonemes**

**Initial/Final/Medial
Sounds**

**Adding/Deleting/
Substituting Sounds**

Story/Text Comprehension

→ Phonological Awareness

Phonics and Letter
Recognition

Communication

Emergent Writing

Grammar

Vocabulary

**Uppercase
Letters**

**Lowercase
Letters**

Letters-Sounds

Story/Text Comprehension

Phonological Awareness

→ Phonics and Letter
Recognition

Communication

Emergent Writing

Grammar

Vocabulary

Purposes and Situations

Story/Text Comprehension

Phonological Awareness

Phonics and Letter Recognition

→ Communication

Emergent Writing

Grammar

Vocabulary

**Name
Recognition and
Writing**

**Writing to Convey
Meaning**

Story/Text Comprehension

Phonological Awareness

Phonics and Letter
Recognition

Communication

→ Emergent Writing

Grammar

Vocabulary

Sentences

Questions

Prepositions

Inflections

Story/Text Comprehension

Phonological Awareness

Phonics and Letter
Recognition

Communication

Emergent Writing

→ Grammar

Vocabulary

Word Meanings

**Word
Relationships**

Story/Text Comprehension

Phonological Awareness

Phonics and Letter
Recognition

Communication

Emergent Writing

Grammar

→ Vocabulary

Phonics and Letter Recognition

Operational Definition: Demonstrates an understanding of letter recognition skills and letter-sound correspondence



Student	Gender	ELL	IEP	School	Teacher	Uppercase	Lowercase	Sounds
Beth	F	N	N	North Lake	Cline	D	NE	NE
Kim	F	N	N	North Lake	Cline	1	2	3
Jeremy	M	N	N	North Lake	Cline	1	2	3
<i>Avery</i>	M	Y	N	North Lake	Best	C	NE	NE
Stacey	F	N	Y	North Lake	Best	1	NE	3
Susan	F	N	N	North Lake	Best	2	2	3
Josh	M	N	N	North Lake	Best	2	3	3
<i>Alex</i>	M	Y	N	South Lake	Javor	2	3	3
Ramsay	M	N	Y	South Lake	Javor	C	NE	NE
Romeo	M	N	N	South Lake	Javor	D	NE	NE
Maggie	F	N	N	South Lake	Javor	1	2	NE
Amy	F	N	N	South Lake	Helms	1	2	NE
Jack	M	N	Y	South Lake	Helms	C	NE	NE
Liam	M	N	N	South Lake	Helms	C	NE	NE
Harper	F	N	N	South Lake	Helms	3	4	4

UPPERCASE LETTERS	Level A	Level B	Level C	Level D
<i>Identifies an increasing number of uppercase letters</i>	Attends to language or communication.		Matches spoken or signed words to images on printed page.	Recites or signs several letter names from previously heard songs or rhymes, often beginning with letters early in the alphabet.
Level 1	Level 2	Level 3	Level 4	Level 5
Names and identifies a few uppercase letters, often beginning with the first letter in own name.	Names and identifies some (at least 5) uppercase letters.	Names and identifies many (at least 10) uppercase letters.	Names and identifies most (at least 20) uppercase letters.	Names and identifies all uppercase letters.

LOWERCASE LETTERS	Level A	Level B	Level C	Level D
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LETTERS-SOUNDS	Level A	Level B	Level C	Level D
<i>Identifies and produces an increasing number of the most frequent sounds that correspond to letters</i>				
Level 1	Level 2	Level 3	Level 4	Level 5
		Identifies and produces the sound for a few letters.	Identifies and produces the most frequent sound for some (at least 5) consonants.	Identifies and produces the most frequent sound for each consonant and the short and long sounds for the five major vowels.

Student	School	Teacher	Upper case	Lower case	Sounds
Beth	North Lake	Cline	D	NE	NE
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Jeremy	North Lake	Cline	1	2	3
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Stacey	North Lake	Best	1	NE	3
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Josh	North Lake	Best	2	3	3
Alex	South Lake	Javor	2	3	3
Ramsay	South Lake	Javor	C	NE	NE
Romeo	South Lake	Javor	D	NE	NE
Maggie	South Lake	Javor	1	2	NE
Amy	South Lake	Helms	1	2	NE
Jack	South Lake	Helms	C	NE	NE
Liam	South Lake	Helms	C	NE	NE
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Other Data Sources?



Informal data

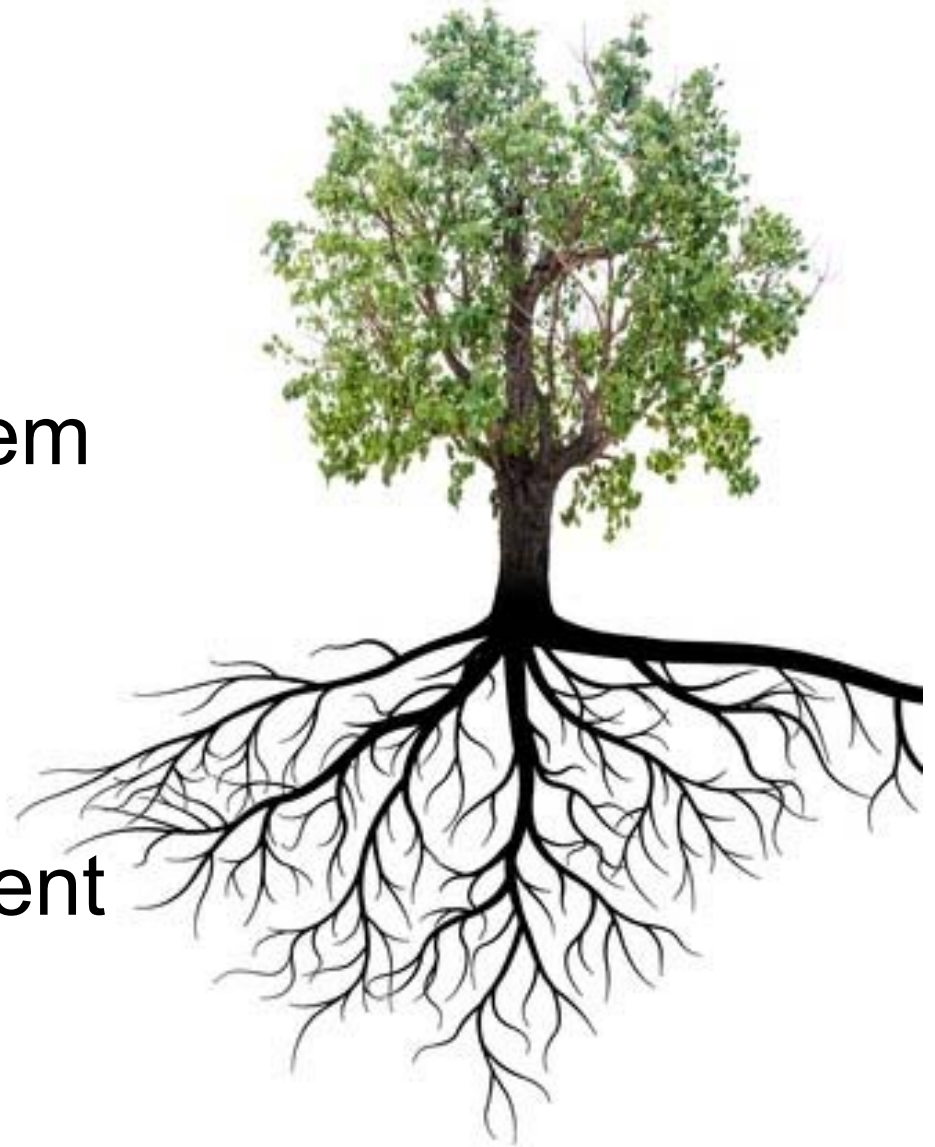
Formal data



Root Cause Analysis

Root Cause Analysis

- Determine the cause of achievement gaps
- Helps identify the problem
- Facilitates discussion
- Rationale for improvement strategies



Root Cause Steps:

Identify the problem

Conduct data analysis

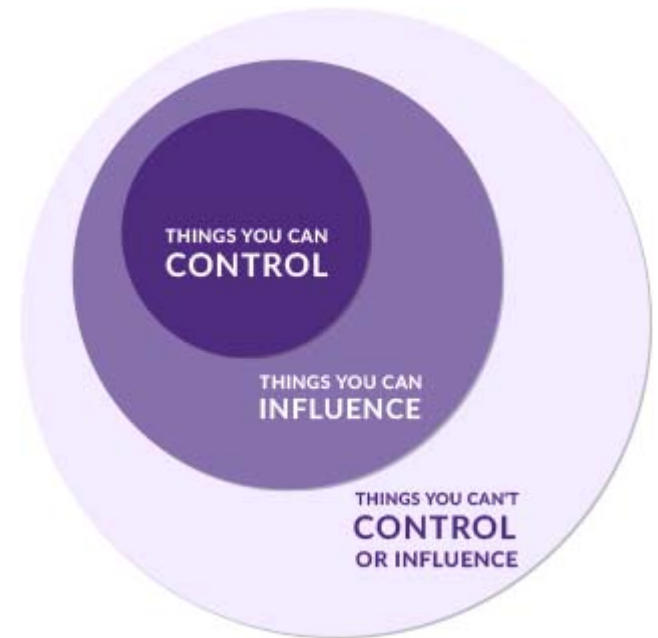
Identify the root cause

Prioritize and plan for improvement

Implement and evaluate progress

Focus on:

- Locus of Control
- Teacher practices
 - Strategies
 - Evidence Based Practices
 - Effective implementation
- Tiered interventions



Problem Solving Approach Teacher Focus

What are key challenges for the Learning Progression?

How are you addressing these?

What are you planning to support growth?

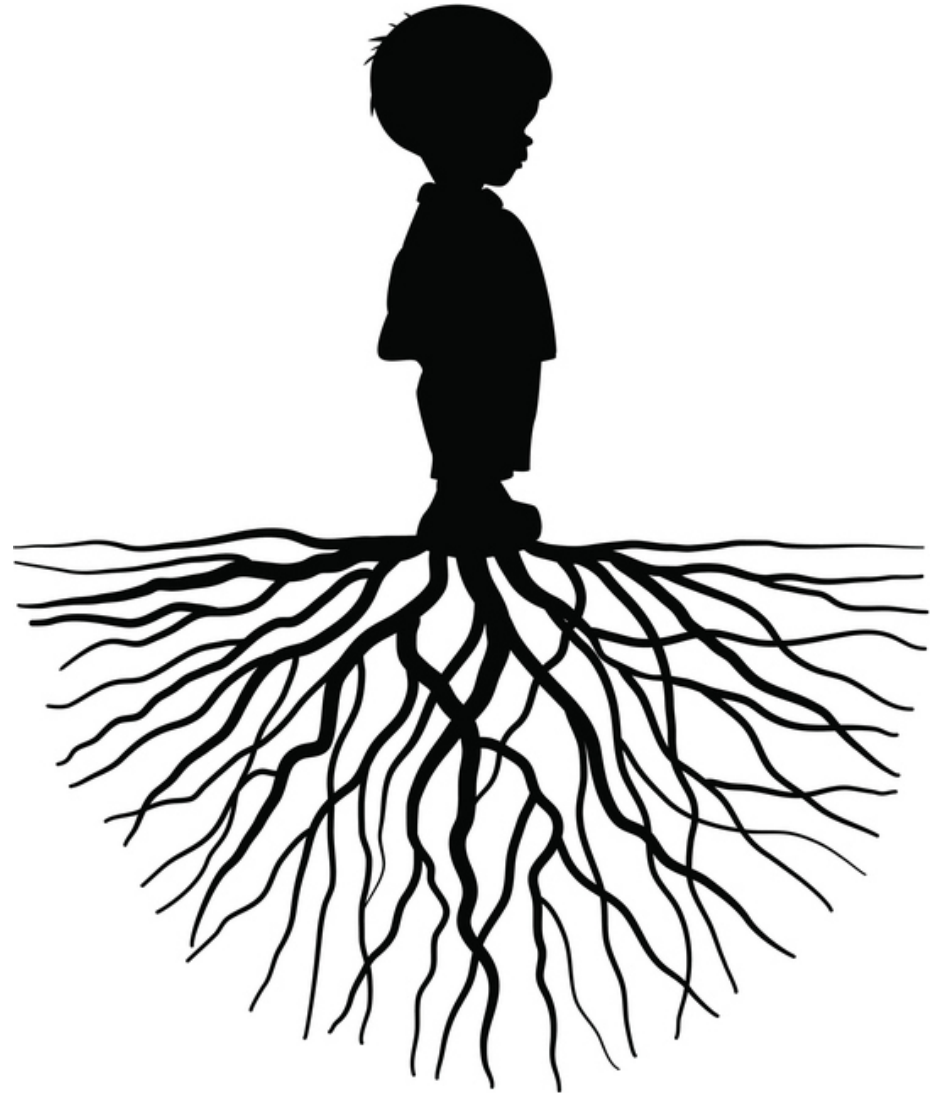
Does this address root cause?

How do these impact students?



Identify the Root Cause

- Look for patterns and trends
- Is there variability?
- Create narrative to analyze data
- Rarely one root cause



Define the Problem

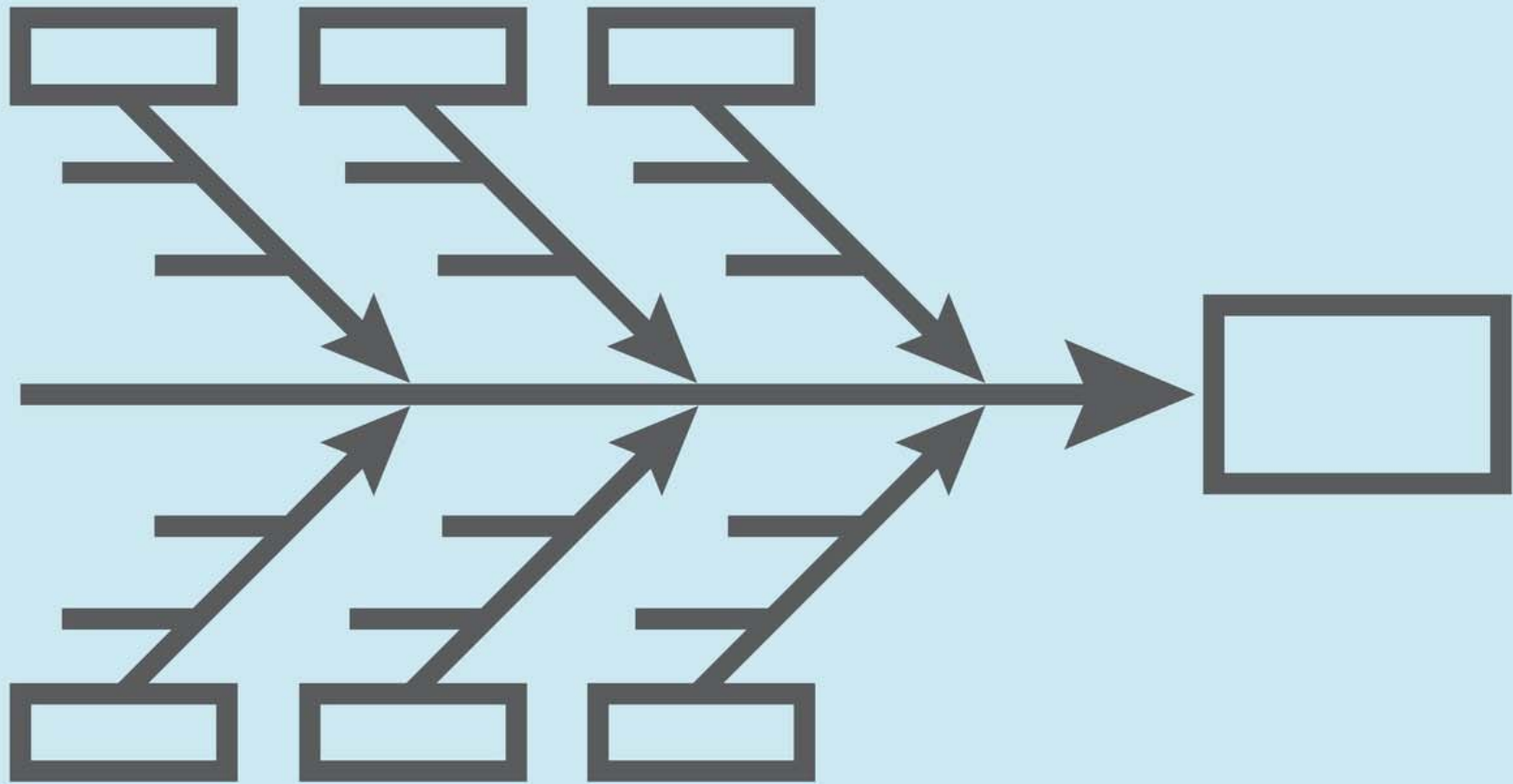


Why is this
happening?

The 5 Whys

Prioritize Causes and Strategies

- Use fishbone diagram to sort causes and strategies for improvement
- Prioritize causes
- Focus on sphere of influence for changes
 - Adult performance
 - Adult implementation
 - Evidence based practices



Plan and Implement Strategies

- Where is the student now?
- Where is the student going?
- How will the student get there?

Plan and Implement Strategies

- What adult implementation strategies will alleviate the achievement gap and address the root cause?
 - Professional Development
 - Mentoring/Coaching
 - Evidence-based strategies**

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Harper	South Lake	Helms	3	4	4

Student	School	Teacher	Persisting with Tasks
Beth	North Lake	Cline	D
Kim	North Lake	Cline	1
Jeremy	North Lake	Cline	2
<i>Avery</i>	North Lake	Best	C
Stacey	North Lake	Best	D
Susan	North Lake	Best	2
Josh	North Lake	Best	3
<i>Alex</i>	South Lake	Javor	3
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Romeo	South Lake	Javor	D
Maggie	South Lake	Javor	1
Amy	South Lake	Helms	2
Jack	South Lake	Helms	C
Liam	South Lake	Helms	C
Harper	South Lake	Helms	4

SOCIAL FOUNDATIONS → Approaches to Learning/Executive Function → Persistence

PERSISTING WITH TASKS	Level A	Level B	Level C	Level D
<i>Demonstrates the ability to persist with a task for increasing lengths of time</i>	Attends briefly to new objects and people.	Explores objects in different ways, such as holding, turning, shaking them, often quickly shifting attention from one object to another.	Explores objects for several minutes on own or with adult support.	Engages in goal-oriented tasks or activities for brief periods of time, but requires adult assistance, especially when difficulties, distractions, or interruptions occur.
Level 1	Level 2	Level 3	Level 4	Level 5
Engages in simple multi-step tasks or activities for brief periods of time, but requires adult assistance, especially when difficulties, distractions, or interruptions occur.	Engages in increasingly difficult or challenging tasks or activities for longer periods of time, but needs adult support when distractions or interruptions occur.	Engages in tasks or activities for extended periods of time, easily managing minor distractions or interruptions and requesting adult support for more significant challenges.	Engages in activities and projects, trying different strategies on own when difficulties, distractions, or interruptions occur, but may need some adult prompting in order to complete the activities or projects.	Engages in and completes activities and projects, independently making the necessary adjustments when difficulties, distractions, or interruptions occur.

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Susan	North Lake	Best	2
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Alex	South Lake	Javor	3
Ramsay	South Lake	Javor	C
Romeo	South Lake	Javor	D
Maggie	South Lake	Javor	1
Amy	South Lake	Helms	2
Jack	South Lake	Helms	C
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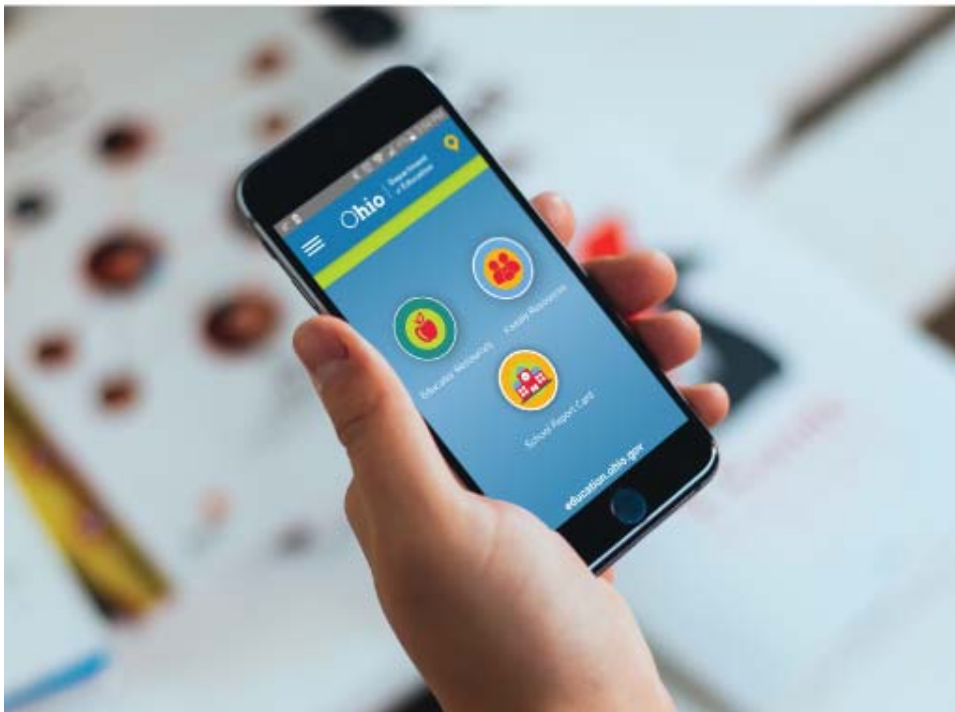


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