Documentation Systems & Outcomes for
Families, Teachers and Children:
What does the research say?

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Introduction

- Mary Elizabeth "M.E." Picher

- Mom of 5 year-old girl and 8 year-old boy

- MA degree in counselling psychology

- Wholeplay Family Services Inc.

- MEd and PhD in Developmental Psychology

  and Education from the University of Toronto

- Psychotherapist and Educational Consultant

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Agenda

- Objectives

- 5 Polls (common misconceptions about DDT)

- DDT use in full-day kindergarten in Ontario:
  purpose, participants, methodology, data sources, results

- Research applications

- Tips for implementation

- Questions?

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Objectives

1. To identify common misconceptions about DDT

2. To become familiar with research on DDT use in ECE

3. To apply research to your ECE program

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Poll #1: Impact

Who do you think digital documentation technology has the biggest impact on?

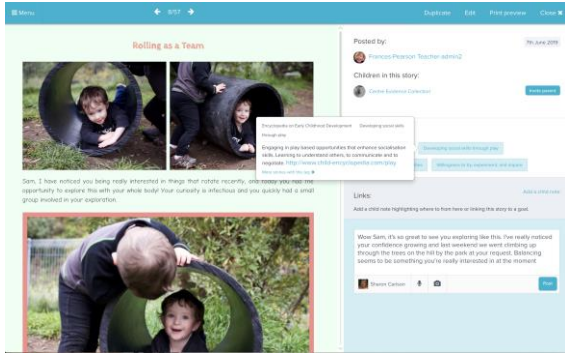A) Educators
B) Parents
C) Students
D) All of the above

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DDT Definition

- Stands for digital documentation technology

- Otherwise known as pedagogical documentation technology or electronic portfolios (e-portfolios)

- Secure, online platforms that allow educators to share stories about their students' learning via text, photos, video and/or audio files with parents

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Storypark

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Purpose

Why study digital documentation technology use in early childhood education?

- DDT use in ECE is becoming more common (examples)
- Very little research on its impact or how to use it most effectively
- Most research to date has been done in New Zealand and UK
- The importance of the home-school connection

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Examples of DDT

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The Effective Provision of Pre-school Education Project

(The EPPE Project, 1999)

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The home learning environment

- The child's family and home environment were roughly **twice as significant** as preschool in influencing cognitive and social development.

- The home learning environment was the most powerful influence on **self-regulation**, the aspect of social development that most influences academic achievement.

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Effective Pedagogy for the Early Years Project

(The EPEY Project, 2002)

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Family Involvement

"Excellent" ECE settings:

- Consistently shared child-related information between educators and parents
- Involved parents in decision-making about their child
- Made significant efforts to involve parents in children's learning at home and at school

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Family Involvement

"Sound learning took place even in the absence of consistently good pedagogic practice in the preschool setting…where there was a **special relationship** between parents and educators in terms of shared educational aims."

THE EPEY PROJECT (2002)

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What is the impact of a DDT on the home-school connection?

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Te Whāriki

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Ontario's Pedagogy for the Early Years

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Poll #2: Educator-Parent Communication

When implementing digital documentation technology into your centre, you can expect face-to-face communication between educators and parents to…

A) Increase

B) Decrease

C) Stay the same

D) None of the above

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- Examined the impact of Storypark on the home-school connection in Ontario's full-day kindergarten program

- October 2016 - June 2017

- Introduced into 11 kindergarten classrooms

- Four schools

- Large, urban school district in Ontario

- Medium to high SES

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Participants

Summary of Research Participants

SITE #	Teachers	ECEs	Point Parents	Principals	Students	TOTAL Interviewed	Participating Families
A	5	5	9	1	15	35	113
B	2	1	3	1	6	13	38
C	2	1	2	1	6	12	36
D	2	1	2	1	6	12	33
TOTAL	11 *	8	16	3 **	33	71	220

*Two kindergarten teachers went on maternity leave halfway through the study and were replaced by two different kindergarten teachers. **Sites C and D had the same principal.

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Design Research

(Collins, Joseph, Bielaczyc, 2004)

1. Laboratory settings vs. "Messy, real life settings"

2. A single dependent variable vs. Multiple dependent variables

3. Controlling variables vs. Characterizing the situation

4. Fixed procedure vs. Flexible design revisions

5. Social isolation vs. Social interaction

6. Testing hypotheses vs. Developing a profile

7. Experimenter vs. Co-participant design and feedback

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Data Sources and Analysis

Source	Qualitative	Quantitative
Document Review	X	
Classroom Observations	X	
Pre-interviews	X	X
Surveys	X	X
Post-interviews	X	
3,000 + stories	X	X
1,500 comments	X	X
1,500		

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Poll #3: Parent engagement

Most typically, parents' concerns about digital documentation technology are that it is…

A) Unsafe for their child

B) Difficult to learn how to use

C) More work for their child's educators

D) All of the above

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Results

Storypark had a positive impact on seven key aspects of the home-school connection including:

1. Educator-parent communication

2. The educator-parent relationship

3. Parents' understanding of their children's classroom learning

4. Educators' and parents' understanding of *The Kindergarten Program* curriculum

5. Parent-child conversations about children's learning

6. Student learning

7. Parents' engagement in their children's learning

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Educator-parent communication

Pre-interviews revealed that a lack of ongoing communication between educators and parents was a significant barrier to the home-school connection.

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"Its very difficult to support the learning in the classroom without knowing what activities are being done."

-kindergarten parent

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Educator-parent communication

- Educators posted an average of 24 learning stories per school day

- Educators posted an average of 1.25 learning stories per educator per school day

- Parents viewed educator learning stories and average of 5.4 times per story

- Parents commented on educator learning stories an average of .45 times per story

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Educator-parent communication

- Approximately 70% of parents said Storypark either greatly increased or somewhat increased their level of communication with their children's educators.

- Post-interview data also showed Storypark increased communication between educators and parents with a particular increase in communication between educators and parents of students in before and aftercare.

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"Storypark increased how much information we received and how quickly we received it, so that was an improvement."

-kindergarten parent

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Educator-parent communication

- Post-Interview data revealed Storypark also *improved* communication between educators and parents.

- Educators preferred Storypark to:
  - Email
  - Social media
  - Other DDT

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The educator-parent relationship

Pre-interviews revealed parents lacked consistent opportunities to develop relationships to their children's educators.

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The before and aftercare are sort of barriers in a way...just the fact that you're not seeing the teacher when you pick up and drop off, you're seeing a different set of teachers."

-kindergarten parent

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The educator-parent relationship

- Approximately 80% of educators said Storypark had either a positive or somewhat positive impact on their relationships to their students' parents.

- Approximately 70% of parents said Storypark had either a positive or somewhat positive relationship to their children's educators.

- Post-interviews with educators revealed Storypark supported the educator-parent relationship.

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"Storypark really helped the relationship because there was more trust that there was actually learning happening in kindergarten."

-kindergarten educator

"I think since introducing Storypark parents are more willing to share the stories that happen at home."

-kindergarten educator

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Classroom learning

Pre-interviews revealed parents had a very limited understanding of what their children were learning about at school.

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"I work a full-time job so I feel like I'm sending her into a black hole."

-kindergarten parent

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Classroom learning

- Approximately 90% of parents said that Storypark either greatly increased or somewhat increased their understanding of their children's classroom learning.

- Post-interview data revealed that Storypark improved parents' understanding of their children's classroom learning.

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"Storypark provided a little window into my daughter's world."

-kindergarten parent

"There was more transparency in terms of the activities the kids were doing in the classroom."

-kindergarten educator

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Learning story themes

Directive 2%

Insightful 5%

Self-explanatory 14%

Descriptive 79%

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The Kindergarten Program
curriculum

Pre-interviews revealed that many educators were unfamiliar with Ontario's new kindergarten curriculum.

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"The curriculum document affects how I do my job. The support that I get from the document, from the board will affect how I do my job…because right now we're waiting to hear about how to use it."

-kindergarten educator

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The Kindergarten Program
curriculum

- Educators used an average of 1.4 learning tags for every story that was posted.

- Approximately 80% of educators said Storypark had either a positive or somewhat positive impact on their understanding of the new kindergarten curriculum

- Post-interviews with educators also showed Storypark supported their understanding of the new kindergarten curriculum.

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"As I tag the curriculum expectations for each story I am growing more and more familiar with the curriculum."

-kindergarten educator

Being able to link to the curriculum has helped me explain to parents the learning that's happening."

-kindergarten educator

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The Kindergarten Program curriculum

- Approximately 70% of parents said Storypark had a somewhat positive impact on their understanding of the new kindergarten curriculum.

- Post-interviews with parents also showed Storypark supported parents' understanding of the new kindergarten curriculum.

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"I saw my daughter doing a lot of play but because of the tags at the bottom, I could tell the purpose behind it…So I would definitely say story park improved my understanding."

-kindergarten parent

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Poll #4: Workload

When implementing digital documentation technology at your centre, you can expect educators' workload to…

A) Only increase

B) Only decrease

C) Increase at first and then decrease

D) None of the above

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Parent-child conversations

Pre-interviews revealed parents had a very difficult time talking to their children about their day.

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"Right now we're just trying to get information out of her. It's really our number one goal. Everyday we compare notes and come up with very little."

-kindergarten parent

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Parent-child conversations

- Post-interviews with educators, parents and students revealed Storypark both improved and increased parents' conversations with their children about their learning.

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"Storypark gave us a springboard, allowed us to have a better conversation about what was happening at school."
-kindergarten parent

"Storypark shows my parents what I've been doing at school so I don't have to tell them so much about my day."
-kindergarten student

"Storypark helps with families conversations over the dinner table. When they get home and say they did nothing…Storypark sparks a conversation
-kindergarten educator

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Student learning

Pre-interviews revealed educators and parents were unsure how Storypark would impact their students/children.

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"It allows me to creep on my son."

-kindergarten parent

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Student learning

- Approximately 75% of parents said Storypark had either a positive or somewhat positive impact on their children.

- Approximately 80% of educators said Storypark either had a positive or somewhat positive impact on their relationships to their students.

- Post-interviews with educators revealed Storypark helped them to celebrate and show appreciation for their students' learning.

- Post-Interviews with parents revealed children enjoyed having their parents see pictures of their learning at school.

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"My daughter likes us to know what's happening in her classroom. She likes to have our involvement."

-kindergarten parent

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Student learning

Post-interviews with 33 four- and five-year-old students revealed that Storypark helped them to:

1. Remember their learning

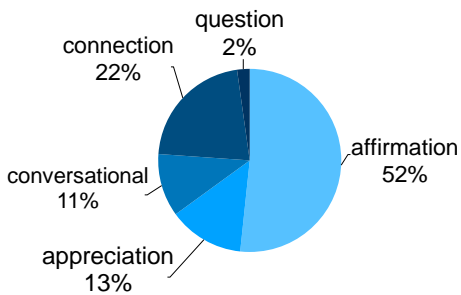2. Feel proud of their learning

3. Talk about their learning

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Parent Engagement

- 3,207 learning stories

- 17,254 parent views

- 1,444 parent comments

- 22% of parents comments were coded as "connection" comments

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Parent comment themes

question 2%

connection 22%

affirmation 52%

conversational 11%

appreciation 13%

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Parent Engagement

- Post-interviews with educators revealed Storypark supported parents' involvement in the kindergarten program.

- Post-interviews with parents revealed Storypark supported their engagement in their children's learning at home.

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"Storypark got parents more involved and brought them into the Kindergarten Program."

-kindergarten educator

"Storypark helped because I got to see what the kids were working on at school and then encourage that a little bit further at home."

-kindergarten parent

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Poll #5: Safety

When considering the online safety and privacy of your students, which method of communication is best?

A) Email

B) Social Media (i.e., twitter and facebook)

C) Digital documentation platforms

D) None of the above

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In summary

Digital documentation technology improved the home-school connection by:

- Increasing and improving educator-parent communication and the educator-parent relationship
- Increasing parents' understanding of their children's classroom learning as well as *The Kindergarten Program* curriculum
- Increasing educators' understanding of and ability to explain *The Kindergarten Program* curriculum to parents
- Increasing and improving parent-child conversations about children's learning
- Supporting parents' engagement in their children' learning at school and home
- Improving students' ability to remember, feel proud of and talk about their learning

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What does this mean for your program?

- DDT can be used to strengthen educator-parent communication and the educator-parent relationship
- DDT can be used to strengthen educators' interactions with students
- DDT can be used to help parents understand and engage in their children's learning at school and at home
- DDT can be used to help parents talk to their children about their learning
- DDT can be used to help students remember, feel proud of and talk about their learning
- Learning tags can be used to help educators make connections to the curriculum as well as support parents understand the curriculum

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Tips for successful DDT use

- Talk to parents about how you want them to use DDT
- Tell parents what to expect in terms of # of learning stories
- Adhere to a consistent posting schedule
- Involve students in documenting, commenting and revisiting learning stories
- Use learning tags (but not too many)
- Post substantive learning stories

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Questions?

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THANK YOU!!!

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