Rediscovering Professional Learning: Creating Engaging & Meaningful Professional Learning in Virtual Settings

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INTRODUCTIONS

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OBJECTIVES

• Sharing the core elements of successful and engaging online professional development.

• Discussing the structure of the most effective online learning formats such as shifting from full in person to asynchronous and hybrid learning options.

• Introducing the features of effective online learning communities of practice.

• Exploring some of the unintended positive outcomes of shifting from in-person to virtual formats.
GETTING TO KNOW YOU

• Who’s in the Room?

• What is your story related to online professional learning?
History of “Distance Learning”

One Way Communication Era

- Courses by Mail: 1700s – 1800s
- Radio Broadcast: 1920s
- Televised Courses: 1950s
- Two-Way Communication: 1980s
EIR GRANTEE REFLECTION

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Math for All - Overview
Project Team

Implementation Team:

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What is Math for All?

- A professional learning program for teachers
- **NOT** a new math program
Goals of Math for All

Enhance teachers’ ability to adapt and implement standards-based math lessons so that learners with diverse strengths and needs have access to high-quality mathematics instruction.
Neurodevelopmental Framework

1. Understand student as a learner
2. Understand demands of the task

Adaptations to the lesson/instruction
Process for Adapting Lessons

• Collaboration between general and special education teachers
• Analysis of the demands of mathematical tasks
• Observations of students to discover strengths and challenges
• Learning and planning during PD sessions then implementation in classroom and reflection on outcomes
# Implementation Schedule

5 workshops (40 hrs) conducted during the school year over 2 years

<table>
<thead>
<tr>
<th>Professional Learning or Planning Time</th>
<th>4 Hours</th>
<th>90 min</th>
<th>45-90 min</th>
<th>45 min</th>
<th>45 min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn about neurodevelopmental framework &amp; lesson planning process</td>
<td>Lesson Planning</td>
<td>Independent reflections</td>
<td>Collaborative Debriefing</td>
<td>Teach adapted lesson</td>
<td></td>
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</tbody>
</table>

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Thank You!

MATH FOR ALL

mathforall.cct.edc.org/pd-information/

@MathForAllPD

MathForAllPD
MYTHS & FACTS
What has been your biggest challenge with virtual professional learning?
BENEFITS OF VIRTUAL PROFESSIONAL DEVELOPMENT

Shift to Virtual/Online Education
Two Way Communication

1984
1st Accredited Virtual University

1989
University of Phoenix

2006
89% of 4 Year Public Colleges offered online classes

21st
Massive Online Open Courses
BENEFITS OF VIRTUAL PROFESSIONAL DEVELOPMENT (1)

- Flexibility
- Community
- Accountability
- Agency

EIR GRANTEE REFLECTION

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Takeaways of Transitioning to a Virtual PD

Presented by
Dana Saito-Stehberger - UC Irvine

March 17, 2022

EIR Webinar:

“Rediscovering Professional Learning: Creating Engaging and Meaningful Professional Development in Virtual Settings”
Aims of Elementary Computing for ALL

- To develop a curriculum that combines computer science and language/literacy for upper elementary students
- To develop supports for teachers so that even those with no experience can teach it
- To iteratively improve the curriculum and the teacher support
## Curriculum Content: New to Most Teachers

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Unit Learning Activities</th>
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<tbody>
<tr>
<td>1. Sequences</td>
<td>1. Concept Introduction</td>
</tr>
<tr>
<td>2. Events</td>
<td>2. Unplugged Activity</td>
</tr>
<tr>
<td>3. Loops</td>
<td>3. Memorable Role Model</td>
</tr>
<tr>
<td>4. Conditional loops</td>
<td>4. Exploring a CS Concept</td>
</tr>
<tr>
<td>5. Synchronization</td>
<td>5. TIPP&amp;SEE and Quest</td>
</tr>
<tr>
<td>7. Variables</td>
<td>7. Turn and Talk</td>
</tr>
<tr>
<td></td>
<td>8. Debugging</td>
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<tr>
<td></td>
<td>9. Building</td>
</tr>
<tr>
<td></td>
<td>10. Vocabulary Review</td>
</tr>
<tr>
<td></td>
<td>11. Reflection Journal</td>
</tr>
<tr>
<td></td>
<td>12. Classmate Comments</td>
</tr>
</tbody>
</table>
Training Teachers to Teach the Curriculum

- Face-to-Face
- 40-hour training over five consecutive days
- Monthly one-hour teacher meetings
Training Teachers to Teach the Curriculum

- Virtual
  - Google Classroom
  - Zoom
  - Slack
- 14 consecutive days
  - Synchronous: 9 hours
    - 6 x 90 min sessions (M W F)
  - Asynchronous Project-Building: 6 hours
- Combined PD with teachers from two other school districts
- Monthly one-hour teacher meetings
Training Teachers to Teach the Curriculum (2)

- Teachers preferred meeting virtually
  - Canvas
- 5 weeks (15.5 hours total)
  - Synchronous: 6 hours
    - 30-min kick off meeting
    - Collaborative Coding Sessions, 5 x 45 min
  - Asynchronous Project-Building and self-paced videos: 14 hours
- Combined PD with teachers from another state
- Monthly one-hour teacher meetings

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Training Teachers to Teach the Curriculum (3)

- Virtual
  - Canvas
- 6 weeks (30 hours - with option to earn units)
  - Synchronous: 14 hours
    - 90 min each week
    - 60 min meet with smaller pods
  - Asynchronous Tasks: 16 hours
- Monthly one-hour teacher meetings
  - Considering a self-guided PD in the future
Key Decisions

● Which learning management system to use?
● How long should the PD take place?
● What is a good balance between synchronous and asynchronous learning activities?
● How to encourage participant interaction?
● How to provide feedback and assessment?
Effective Professional Development

**General K-12**

From Desimone's Effective PD Conceptual Framework (2011)

- Active Learning
- Coherence
- Collective Participation
- Content focus
- Duration

**Virtual Environment**
Effective Professional Development, Con’t

General K-12

Virtual Environment

From Quality Matters (2019), the Online Course Quality Rubric (2020) and O’Toole (2019)

- Course overview with clear learning objectives
- Variety of learning activities
- Learner support
- Accessibility and usability
- Networked Learning Communities
Teacher Feedback

“Do you have any suggestions to improve this experience for others?”

“No, I loved the way we could go through at our own pace. I also enjoyed meeting in breakout rooms. Great first week!!! Thanks.”

“I like Google Classroom better.”

“Maybe in the first week show teachers where they can find the resources to download if needed.”

“I loved the use of Canvas it was very easy to use.”

“Canvas is an awesome tool. They organization of this PD with the videos and hands on projects really makes me feel confident about teaching this to my students.”
Teacher Feedback

“Do you have any triumphs or challenges you wish to share?”

“My challenge is getting comfortable in setting up my class. I will have to watch the video several times, which is quite informative.”

“Never give up!! Learning through the whole process.”

“Triumphs/ challenges I made it in the end. I learn so much and still practicing as I complete my last project. Thank you so much!”
Main Take-Aways

- Flexibility and adaptability
- Community building and accessible support for participants
- A variety of learning activities
References – UC Irvine


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I used to think...

Now I think......
Considerations for Online Professional Learning

- Test Technology before session - Video, Audio, Lighting, etc.
- Video on
- Review Norms & Expectations
- Breaks for longer sessions or do multiple sessions
- Multiple Intelligences still apply
- Build Rapport & be inclusive
REFLECTIONS

- Unintended positive outcomes of moving to a virtual environment
• What questions and wonderings do you have about how to deliver better virtual learning opportunities for staff?
**ADDITIONAL INFORMATION**

- Continue this conversation with the U.S. Department of Education’s EIR Program – EIR@ed.gov

- Florida National University (2019) The Evolution of Distance Learning
  [https://www.fnu.edu/evolution-distance-learning/#:~:text=Distance%20learning%20had%20greatly%20developed,%2C%20videoconferencing%2C%20and%20the%20Internet](https://www.fnu.edu/evolution-distance-learning/#:~:text=Distance%20learning%20had%20greatly%20developed,%2C%20videoconferencing%2C%20and%20the%20Internet)

  [https://www.hanoverresearch.com/resources/best-practices-online-professional-learning/](https://www.hanoverresearch.com/resources/best-practices-online-professional-learning/)

