IDLL:
Innovative Experiment Building Self-Efficacy for Teachers and Learners in Digital Literacy and Technology Integration

Michael Matos, IDLL Manager

Technology Project Manager

Chicago Citywide Literacy Coalition
Meet IDLL: Background and Data w/Michael Matos

Instructor Efficacy w/Joy Pak

The Building Better Digital Bridges (BBDB) Team w/David Rosen

Digital Literacy - Not a Skill, a Language w/Colleen Stribling
Our Mission

THE CCLC HELPS CHICAGO’S ADULT EDUCATION ORGANIZATIONS SECURE RESOURCES AND TRAINING SO THAT UNDERSERVED ADULT LEARNERS CAN BECOME ECONOMICALLY SUCCESSFUL, AND REFRAMES ADULT BASIC EDUCATION AS A CRITICAL PUBLIC POLICY ISSUE.
The Problem

- An estimated 2.2 million Illinois adults or 18% of our population have limited skills in reading, writing, math or English proficiency.
- Digital tools offer the promise to improve the effectiveness and reach of adult education.
- For many, adult education is the most accessible, affordable avenue for mobility.
- In today’s economy, continual learning and critical thinking skills are crucial for success.
- 32 million U.S. adults are not digitally literate. This makes up U.S. adults who do not have sufficient comfort or competence with a computer to find a recipe, make retail purchase, search for a job, file taxes online, or read an article online.
- Over 80% of our adult education learners have less than basic computing skills.
IDLL is a cohort-based professional development model supported by the Grand Victoria Foundation:

- helps adult educators and learners build digital literacy skills
- while creating technology-rich learning environments for adult learners.
I feel confident that I can create meaningful learning experiences to motivate my students for virtual active involvement.

Yes
No
Maybe
The Illinois Digital Learning Lab (IDLL) is an innovative experiment integrating digital literacy skills and technology Integration through the development and implementation of best practices.
In the IDLL, we focused on curating a collaborative, peer-to-peer learning environment for sharing strategies that encourage educators to take charge of their technology professional development. Core elements of the IDLL include:

1. Support for adult educators in effectively incorporating learning technology into the classroom using subject-matter experts (SMEs) and curated resources.
2. A facilitated learning community for educators and administrators to support, advise, and learn from each other and from the resources they find valuable.
3. Capturing insights about the most effective digital tools, delivery models, support strategies, which can then be shared across the state of Illinois.

Participating educators act as entrepreneurs, research digital tools, and experiment with a range of technologies in the classroom. Our intent is for educators to also reimagine their roles as innovators and technology advocates.
Program design for 2020-2021 our third project year includes:

- 30 educators/administrators from 25 organizations throughout Illinois.
- Five subject-matter experts (SMEs) supporting five cohorts (6 members in each) that included a diverse set of participants (type of organization, role, curriculum, geographic location, student demographics).
- The cohorts meet monthly via Zoom (not a COVID thing) monthly.
- Participants if needed adjust hypothesis, goals and metrics at the beginning of each Sprint (3 Sprints each about 4 months long).
- The full community gathers for three peer-to-peer events (launch, mid-point, closing event).
Metrics

- **Frequency of technology use** outside of the classroom (self-reported survey)
  We will measure progress with student outcomes, feedback, ease of use, level of comfort, rate of use outside of school, and mobile options used.
- **Keyboarding/typing improvement** (quantitative wpm)
  Typing.com 1 minute test results, then compile and chart
- **How to Navigate a Tablet**
- **How to Use Google Docs**
  - Powerpoint for vocabulary
  - Excel spreadsheet
  - Know how to create a file, sharing a file/doc
- **How to Access Educational Resources online** (Northstar?)
  Type: Quantitative - Number of students who accomplish the above 3 metrics.
  How to Capture Metric: Survey and Observation
- **# of students contributing** to newsletter (start vs end) - quantitative
- **Class attendance rates** - quantitative
- **Pre/Post surveys on technology comfort** questions (capture their reaction to the finished product) - qualitative
- **Use a likert scale around student confidence** Here is a technology survey
  - Handout with question “Do you feel more confident in your computer and internet skills?” 1) No, not at all, 2) A little, 3) Some, 4) Quite a bit, 5) A lot
  - May need to define confidence for lower level students
I feel confident I can regularly incorporate technology into my lessons.

Yes
No
Maybe
IDLL supports teaching effectiveness, increases learner engagement, accelerates learning, closes the “technology gap” so adult learners gain 21st century skills and reaches students when in-person services are unattainable.
IDLL has:

● Developed technology integration leaders who could support future professional development at the local level.
● Established the importance of assessing digital literacy skills and instruction.
● Supported educators and learners in reaching curricular and individual goals.
● Helped adult learners become more confident in using technology both within and beyond the classroom.
IDLL has learned several valuable lessons that we are looking to build upon. To increase the likelihood of technology adoption success, it’s important to:

- Adopt an always-learning culture so students, teachers, and administrators continuously build new skills together.
- Offer a variety of training methods and supports, including lecturing, modeling, and exploratory (hands-on) learning.
- Lead with learning, not with the technology. The stories we tell should focus on how our learners are better served through technology integration.
IDLL has learned several valuable lessons that we are looking to build upon. To increase the likelihood of technology adoption success, it’s important to:

- Provide many avenues for key stakeholders to be involved, co-create, and share feedback. Giving everyone a voice ensures the conversation will be equitable and aligned with the needs of students and staff.

- Communicate regularly and keep the vision at the forefront. There are bound to be unique challenges that the team encounters; it’s much easier to stay motivated and focused if the vision for learning remains central to each conversation.
IDLL Takeaways

- Cohorts feel ready to be leaders in technology integration professional development efforts
- Participated in COABE, LINCs & IACEA sessions
- Prepared to take lead on future challenges at Colleges/CBOs
- Educators prepared for the challenges of remote learning
- Students prepared and many had less “down time”
- Experience highlighted importance of digital literacy skills
**IDLL Takeaways**

- Early digital literacy efforts (e.g., student email) became lifelines.
- Digital literacy instruction is possible at any and all levels.
- Engagement outside of class requires modeling + consistency.
- Routine integration of tech increases likelihood it will be used outside of class.
- Establishing we are all learners can diffuse confidence issues + reluctance to try.
IDLL Takeaways

- Unconditional support among the team when challenges are presented
- Throughout this project, the instructors and students were flexible and adaptable
- Find, purchase, test out with our students, and assess the success of a wide range of technologies
- Learn new platforms and improve our personal and professional digital skills
- Keep students engaged and improve attendance
IDLL Quotes

- "learning as a lifestyle, not obligation"
- “help with your mouth and not with your mouse”
- "we pay for staff or we pay for stuff"
- “meet students where they are”
- “community is important!”
- Not “nice to have/do” but “must have/do” to be life and career ready

Best Laid Plans can be derailed by life
Professional Development Needs:
Understanding the different course approaches to teaching and learning with technology (i.e. blended learning courses, hybrid learning courses, flipped learning courses, flex learning courses).

High Priority
Some Need
Low Priority
Technology can be a powerful tool for transforming learning in adult education.
The Illinois Digital Learning Lab a community of adult education, instructors, administrators, subject matter experts and learners.
Tech Visits

Our Lab participants in blended learning, hybrid and at-a-distance approaches have been using these resources with their students and clients through a variety of technology.
The Illinois Digital Learning Lab a community of adult education, instructors, administrators subject matter experts and learners.

2020-present COVID
Professional Development Needs:
Managing the technology-enhanced classroom (i.e. choosing tools that fit your goals, from linear to an exploratory mode of learning, teacher going from 'sage on the stage' teaching model to ‘guide on the side' teaching model, empowering students to take charge of their learning, and more).

High Priority
Some Need
Low Priority
We shrink long-standing digital equity and inclusion gaps.
Professional Development Needs:
Facilitating and proctoring virtual assessments (i.e. Northstar, CASAS, TABE, I-BEST and more).

High Priority
Some Need
Low Priority
Instructor/Staff Self-Efficacy toward Educational Technology Pre-Survey
The Illinois Digital Learning Lab: Learner Pre/Post Technology Self-Efficacy (English and Spanish)
1. Was the technology tool fun to use? 93.1% YES
2. Was the technology tool easy to use? 84.3% YES
3. Would you recommend the technology tool to others? 95.1% YES
4. Would you use the technology tool outside of class? 94.1% YES
5. Was the learning resource (website or App) fun to use? 94.1% YES
6. Did the learning resource (website or App) help you learn? 96.1% YES
7. Would you recommend the learning resource (website or App) to others? 95.1% YES
8. Would you use the learning resource (website or App) outside of class? 91.2% YES
9. Do you look forward to continuing to use technology to learn? 97.1% YES

IDLL Technology Use Student Post-Survey
317 students responded
10. What was your favorite learning resource (website or App)?

- AnkiDroid Flashcard App
- Burlington English
- Burlington English Core
- Cambridge Dictionary
- Coursera
- DuoLingo
- EngVId
- Google Classroom
- Google Applied Digital Skills (AppSki)
- Google Classroom
- Google Docs/Suite
- Google Translate
- i-pathways
- IXL
- Kahoot
- Khan Academy
- Learning Upgrade App
- Magoosh
- New Readers Press Online - ABE
- Newsela
- News For You Online
- Northstar
- Quizlet
- ReadWork
- Shodor.org
- VoiceThread
- YouTube
These assessments are critical to our instructors to determine student needs and assess student learning. These assessments are great motivators to our learners in improving their digital literacy skills and seeing their improvement on an assessment report. We encourage learners to add these accomplishments to their resumes, showing specific computer skills they have gained. The Northstar certificates and badges could have meaning for learners in the workplace.

- 32 organizations
- Over 2,200 Assessments Taken
- Over 1400 Assessments Passed

- Over 1000 Northstar Certificates Earned

- Over 400 Northstar Badges Earned
Selecting Resources

To support learning with technology
Technology is not an event, it’s a part of everyday learning!
Technology Integration | Two Approaches

Lead with the Technology or Resource

Lead with the Learning Experience
Learning Experience | Instructional Phases

**Warm Up**
- Provide a broad overview of the content, concepts, and skill to be taught during the lesson.

**Presentation**
- Introduce or demonstrate information in a variety of modalities (e.g., visual, written, etc.)

**Practice**
- Engage learners in activities to practice the new skills and concepts.
Learners engage with other learners during the lesson.

Learners engage with the instructor of the lesson.

Learners engage with the instructional materials.
Learning Experience Map

Instructional Phases

- Warm Up
- Presentation
- Practice

Learner & Learners
Learner & Instructor
Learner & Content

Learner Engagement Approaches
Learning activities, tools, and skills to be practiced.

<table>
<thead>
<tr>
<th>Warm Up</th>
<th>Learner &amp; Learners</th>
<th>Learner &amp; Instructor</th>
<th>Learner &amp; Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation</td>
<td></td>
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<tr>
<td>Practice</td>
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Plan lesson activities, tools, and skills to be practiced.

<table>
<thead>
<tr>
<th>Learner Experience Map</th>
<th>Examples of Tools</th>
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<tbody>
<tr>
<td></td>
<td>Learner &amp; Learners</td>
</tr>
<tr>
<td><strong>Warm Up</strong></td>
<td>Nearpod</td>
</tr>
<tr>
<td><strong>Presentation</strong></td>
<td>VoiceThread</td>
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<tr>
<td><strong>Practice</strong></td>
<td>Kahoot</td>
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</table>

Plan lesson activities, tools, and skills to be practiced.
# Top 200 Tools for Learning | By Educators

toptools4learning.com

<table>
<thead>
<tr>
<th>RANKING</th>
<th>CHANGE FROM ‘18</th>
<th>TOOL</th>
<th>PPL100</th>
<th>WPL100</th>
<th>EDU100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>same</td>
<td>YouTube video platform</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>up 1</td>
<td>Google Search web search engine</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>down 1</td>
<td>PowerPoint presentation app</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>same</td>
<td>Twitter social network</td>
<td>3</td>
<td>19</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>same</td>
<td>LinkedIn social network</td>
<td>4</td>
<td>15</td>
<td></td>
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<tr>
<td>6</td>
<td>same</td>
<td>Google Docs &amp; Drive file sharing and collaboration</td>
<td>6</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>same</td>
<td>Word word processing app</td>
<td>8</td>
<td>4</td>
<td>4</td>
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# Top Tools | Categories of Digital Resources

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<tbody>
<tr>
<td>5. Web browsers</td>
<td>15. Interactive video &amp; content</td>
<td>25. Email tools</td>
</tr>
<tr>
<td>7. Presentation tools</td>
<td>17. Forms, survey &amp; quiz tools</td>
<td>27. Mindmapping tools</td>
</tr>
</tbody>
</table>
Professional Development Needs:
Evaluating technology use equity issues (i.e. digital divide issues such as whether a student has affordable and reliable Broadband access, a computer or Chromebook vs. only a smartphone, basic digital literacy training, advanced digital literacy skills training such as on problem-solving in a digitally rich environment and more).

High Priority
Some Need
Low Priority
Instructor Efficacy

Joy Pak, SME and Team Leader
Pandemic Shutdown

Some Truths:

- Immediate transition to distance learning
- Challenges for learners in transitioning to digital learning
- Focus was on learners adapting and continuing and not on proactive support and well being for instructors
In order to succeed, people need a sense of self-efficacy, to struggle together with resilience to meet the inevitable obstacles and inequities of life.

Albert Bandura
What is Self-Efficacy?
People can identify goals, recognize what they want to change and what they want to achieve

BUT

Implementing an action plan to achieve those goals are not so simple.
Albert Bandura, a Canadian-American psychologist, defines self-efficacy as the “belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations.”

Self-efficacy is the belief in a person’s ability to succeed in a particular situation. This belief plays a major role in how goals, tasks, and challenges are approached.
People with a weak sense of self-efficacy:

- Avoid challenging tasks
- Believe that difficult tasks and situations are beyond their capabilities
- Focus on personal failings and negative outcomes
- Quickly lose confidence in personal abilities
People with a strong sense of self-efficacy:

- Develop deeper interest in the activities in which they participate
- Form a stronger sense of commitment to their interests and activities
- Recover quickly from setbacks and disappointments
- View challenging problems as tasks to be mastered
IDLL creates an environment to help support instructors and administrators from different areas of adult education.
In Summary: We can view the importance of Instructor Efficacy through "The Wisdom of Geese."
The Building Better Digital Bridges (BBDB) Team

David Rosen, SME and Team Leader
The IDLL from a team/cohort point of view

Some short descriptions of what the six BBDB team members are doing

• Joanne works in a Chicago CBO. She trains and supports volunteer ESL tutors. Her Overall Goal: over an 18-month period, to work with them to create a basic phonics curriculum and prepare to use it with students on Google Classroom. She is also introducing them to different digital tools that they will use in the lessons, to Google Drive to store curriculum, Google Classroom as an LMS to create a synthetic phonics course curriculum to teach either adult literacy or ESL students. Each curriculum module will have built-in assessments using online tools such as: Quizziz, Quizlet, and Kahoot quizzes, and should be enjoyable and fun for the students. The final curriculum will be 12 to 14 weeks long. This will done in two overlapping phases: 1) Creating the curriculum, and 2) Using google classroom with students.
The IDLL from a team/cohort point of view

• Mary works in a Community Center. She wants to increase her students’ and her own proficiency in using What’s App and other platforms to increase asynchronous study time. Her students will learn to: 1) send/receive photos, 2) send/receive video messages, 3) open/send website URLs, 4) open Zoom in Chromebook, and 5) improve their use of Burlington English.

• Christine works in a college. In the first sprint, she tested the Burlington English Core curriculum, as a totally online format, with low-intermediate, high-intermediate and advanced level ESL students. This is a multi-level class and each level uses a different Core version. She has students using Chromebooks as a “guest”. In the second sprint, she is testing new SWIVL technology in a variety of settings including: classroom, training and orientations in preparation for moving to a BlendFlex model at her
The IDLL from a team/cohort point of view

• William works in a community college that is introducing a BlendFlex model. His adult education department has purchased the pilot for the *IXL* Curriculum, and students and teachers are logged in and using it. Pre- and post-tests of students using these will be used to compare the effects of synchronous and asynchronous instruction on student performance. William’s hypothesis is that a combination of synchronous and asynchronous instruction will produce better learning outcomes than only synchronous or only asynchronous, based on data from standardized assessments.

• Moisés works in a CBO. His clients (students) are using the *Northstar Digital Literacy assessment* and curriculum in order to learn digital literacy skills, and to acquire certificates that they can add to their resumes. They set-up personal accounts to work at their own pace.

• Lisa works in a program in a Community High School District. In sprint two, she is using digital tools to create community in the classroom as well as program-wide, and to see how creating a sense of community affects student recruitment, retention and success (passing their classes and the HSE tests). She will use a SWIVL camera and other tools and strategies for hybrid community building.
The IDLL from a team/cohort point of view

- IDLL as **action research** or **teacher or classroom research** with a focus on helping learners use technology effectively for learning

- **Trying out cutting edge technology**
  - E.g. Last year, the previous year, and this year: Virtual Reality Goggles
  - This year: SWERV robot 360 degree classroom cameras for BlendFlex learning

- **Peer learning among team members**

- **Support for the team member organization’s or institution’s work teams**

- **Developing capacity for the field**
Colleen Stribling

Title: Associate Professor ESL
Elgin Community College
My “Lab” Experience

● My Focus Classes:
  ○ Adult ESL Students varying levels of education & digital literacy
    ■ High Beginning* - 14 students (Fall semester)
    ■ Low Intermediate* - 15 students (Spring Semester)

● Home-schooled Additions:
  ○ Advanced ESL - 12 students
  ○ Early Childhood Education Bridge - 3 students
Classroom Technology

- Varied
  - Standard (Fall)
  - Desktops (Spring)
- Access to Chromebooks (1 cart)
- I-Pads - IDLL**
Resources

- Burlington Core Pilot
- LMS - Desire2Learn
- G-Suite
- Quizlet
- Zoom* (post-pandemic)
Outcomes of my “Lab” Experience:

- **Skill development**
  - Collaboration through G-Suite
  - Rich conversations in D2L
  - Ability to access and post materials

- **Technology use out of the classroom**
  - Burlington - average of 10 hrs per student remotely
  - Asynchronous conversations
  - Zoom - 90% attendance post-pandemic
Examples of work:

You are all expert language learners. If you met someone who recently arrived to the the United States from your country, what advice would you give him/her about learning English? What practices/techniques have helped you learn? Is there anything he/she shouldn't do?
Interior Designer (Nayelli)

What Do: Spaces functional, safe, and beautiful.

How to Become: Bachelor’s degree.


Designers will be needed to respond to consumers’ expectations that the interiors of homes and offices meet certain conditions, such as being environmentally friendly and more easily accessible.
Successful Transitions
My Lessons Learned

● **Digital Literacy - Not a skill, a language**
  ○ Teach & integrate techniques from Day 1 at every level using whatever you have (Ex: LMS).

● **Keep it simple**
  ○ Resources are overwhelming
  ○ Mastering a few good tools is much more effective than touching on many.
My Lessons Learned

● **Own your place - I am a digital immigrant**
  ○ Use the Funds of Knowledge in your classroom
  ○ Group students to leverage this expertise

● **Build Community**
  ○ Techniques used in FTF classroom (Whip Arounnds/Who are We?/Bell Work Activities) were critical to our post-pandemic survival.
  ○ Challenge - virtually building community
My Lessons Learned

- **Value of a Village**
  - Lab Design
    - Pre-, Mid-, Post- Events
  - Participant Teams
    - Statewide
    - Variety of Sites
  - Subject Matter Leaders
Unexpected Outcome – Virtual Book Club

Group still meets weekly
10 weeks after class ended!
(3-6 students a week)

Learning Experience for all
Students are building skills.

I am practicing with new
resources to use in the fall!

I felt more reliable to talk with other people - Sara
I want to keep learning and keep track of the teacher. Goody
I want to speak English more fluently, and thanks to
these meetings, I make it better. - Marcela