An Introduction to Nemeth Code Symbols Used in Grades 2 to 5 and Strategies for Supporting Elementary Students in Building Math Skills

Lesson 7: The 3Cs of a Digital Workflow: Capture! Convert! Cloud!
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Lesson 7 Objectives

Participants will be able to:
1. Define what a digital workflow means for blind and low vision students.
2. Capture print media in a digital format.
3. Convert digital media into accessible formats.
4. Share instructional materials in real time via the cloud.
Digital Workflow = An efficient electronic system for accessing, processing, sharing, and storing work

Digital Workflow: Advantages

• Digital media can provide greater:
  • flexibility
  • portability
  • efficient multimodal access to information
• Empowers students to utilize their tool of choice with maximum independence and flexibility to change their method of access.
• Empowers general ed support of VI student
• Supports access to the Core Curriculum
• Models college and professional workflows
Digital Workflow: Disadvantages

• Dependent on infrastructure for:
  • cloud computing
  • training
  • technology toolbox
Requirements for Navigating a Digital Workflow

• Student has appropriate technology.
  • Multiple devices

• Student can select, use, and efficiently switch between tools as needed.

• Accessible media (digital multimedia accessibility)
  • Text
  • Images
  • Video
For More Info...

• Ting’s Accessibility Tip Sheet

• AT Book (Siu & Presley, 2020)
  • Chapter 3, Technologies for Accessing Digital Text
  • Chapter 6, Strategies for Accessing Multimedia and Data
The 3Cs of a Digital Workflow: Capture! Convert! Cloud!
Capture!

Capture paper media in a digital format

• Camera & scanning apps
  • Scanner Pro, MS Office Lens, Claro PDF, etc.
  • Integrated with a cloud storage app

• Artificial Intelligence (AI)
  • Seeing AI

• Digital snapshots/screenshots

• Recreate
Sample Worksheets

Identifying 2D Shapes

Directions: Write the name of each shape below. Use the word bank to help you. Use your pencil to shade/fill in the shape if it is a quadrilateral (a closed shape with 4 straight sides).

1. circle
2. square
3. rectangle
4. triangle
5. pentagon
6. parallelogram
7. trapezoid
8. hexagon
9. rhombus

Name: ___________________ Date: ____________

Score: ___________________

Teacher: ___________________ Date: ____________

Math-Aids.Com
Turn Paper Notes into Digital Formats

Notetaking apps
- Notability
- Evernote
- MS OneNote
- GoodNotes
- Quizlet*
Example: Math Worksheets

2.4 Math Lesson: Subtraction

1.  
5 7 6  
2 4 6  
3 3 0

2.  
3 9 8  
2 3 5  
1 6 3
Considerations for Digital Math: Accessible Math Workflow Using Equatio and MSWord (YouTube: AT Neal)

- https://www.youtube.com/watch?v=wzarEOCPma8&feature=youtu.be&amp;app=desktop
Convert!

Convert digital media to accessible formats
- Optical character recognition (OCR)
- “Open with” Google Docs
- Annotation ready
  - Adobe Fill & Sign
  - SnapType
  - Skitch
  - Claro PDF
  - iBooks, VoiceDream Reader
Cloud!

Share instructional materials in real time
• Save/sync across devices
• Access via secure login
• Collaborative work with teachers and peers
• Cloud storage
  • Dropbox
  • Google Drive
  • iCloud
Workflow Design and Implementation

(AT Book, Chapter 8)
Needs Assessment (Siu, 2020)

- Aggregate data from FVA & LMA
- Identify sensory access needs
- Identify areas for improved independence or efficiency
- Identify technology features
Digital Workflow Planning Tool (McDowell, 2019)

• Identify student’s infrastructure
• Identify needed training or support
• Identify future considerations
Data Literacy: Considerations

(AT Book, Chapter 8)
Orientation Between Physical and Virtual Environments (YouTube: AT Neal)
Scaling Up Digital Literacy Skills
(AT Book, Ch. 10, www.sascha-kasper.com)
Video Tutorials: YouTube Channels

- AT Neal (distance and remote tips)
- viteacherJes (digital workflows)
- Diane Brauner (Apple, nonvisual)
- Luis Perez (Apple)
- Dr. Denise M. Robinson (PC, nonvisual)
- VI Program SFSU (TechTalks)
- Vignettes
  - bit.ly/coursea11y → Guest Interviews