

Digital Diversity: Respecting and Meeting the Needs of All Writers

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Today's Objectives

At the end of this session you will understand the:

- ◆ Benefits and features of digital diversity
- ◆ Power of writing to develop reading and thinking skills
- ◆ Obstacles/barriers to the writing process
- ◆ Role of Universal Design for Learning
- ◆ Practical application of digital diversity in language arts
- ◆ Availability of digital tools, strategies and resources to help create educational equity

Today's Essential Questions

- ◆ How does digital diversity in the language arts classroom nurture and improve student learning and develop creativity?
- ◆ Which of your students might benefit in some way from an increased presence of digital diversity in your classroom?

Digital Diversity

- ◆ Integration of "universally designed technology"
- ◆ Myriad of hardware/software choices
- ◆ Personalized instruction and differentiation
- ◆ Flexibility allows focus on learner strengths
- ◆ Addresses NETS for students and teachers
http://cnets.iste.org/students/s_stands.html
http://cnets.iste.org/teachers/t_stands.html
- ◆ Preparation for potential NCLB tech goals
- ◆ Transforms teaching and learning
(Rubenstein, 2006)

Writing - A Vital Part of All Good Instruction

The essential elements of good instruction:

- ◆ providing clear learning objectives
- ◆ including frequent assessment and adjustment of lessons
- ◆ **having students read for higher-order reasons and writing regularly**
- ◆ explaining and teaching evaluation criteria that has been presented in a rubric
(Schmoker, 2006, p.27)



Authentic Literacy

- ◆ "Generous amounts of close, purposeful reading, re-reading, writing and talking are...the essence of authentic literacy. These simple activities are the foundation for a trained purposeful mind – and a promising future."

(Schmoker, 2006, p.53)

Writing and Thinking

“If students are to make knowledge their own, they must struggle with the details, wrestle with the facts, and rework raw information and dimly understood concepts into language they can communicate to someone else. In short, if students are to learn, they must write.”

(National Commission on Writing, 2003, p.9)

The Writing Process - Obstacles and Barriers for Students

- ♦ 78% of college-bound students will struggle with writing.
(Cavanaugh, 2004b, p.5)
- ♦ Writing production - the physical act of using a writing tool and sharing information
- ♦ Planning - getting the ideas organized in the mind and in some form as text, audio, image, discussion
- ♦ Product creation - selecting writing genre to use: persuasive, opinion, expository or narrative
- ♦ Evaluation – assessment of content and production

Writing Production

Process

The physical act of using a writing tool and getting words on paper

Obstacles to Overcome

- ♦ Choice of traditional tools
- ♦ Negative thoughts about the process of writing
- ♦ Number of ideas filling the mind
- ♦ Fast speed at which words are coming out
- ♦ Inhibited personality that avoids performance risk – cognitive rigidity

(Doug Kutner, 2004)

Writing Production

Process

The physical act of using a writing tool and getting words on paper

Obstacles to Overcome

Mechanics:

- ♦ Letter formation
- ♦ Sensory integration / control
- ♦ Kinesthesia
- ♦ Visual perception
- ♦ Spatial concepts
- ♦ Visual motor integration
- ♦ Fine motor coordination
- ♦ Pencil grip
- ♦ Posture and positioning
- ♦ Endurance

Planning

Process

Organizing writing ideas in the mind and in some form as text, audio, image, discussion

Examples

Prewriting planning:

- Focus on meaning
- Motivators and interests
- Thought and idea generation
- Memory / retrieval
- Brainstorming, mind mapping
- Keywords and phrases
- Categorize and clustering

Planning

Process

Organizing writing ideas in the mind and in some form as text, audio, image, discussion

Barriers for Students

- ♦ Lack of time
- ♦ Self-criticism
- ♦ Lack of awareness of the benefits of planning
- ♦ Lack of choice in planning options that matches learning style
- ♦ Lack of modeling of the planning process and of samples of planning

Product Creation

Process

Selecting writing genre to use: persuasive, opinion, expository or narrative

Drafting and editing: clarifying content and proofreading

Barriers for Students

- ♦ Lack of time/formula format/traditional choices
- ♦ Caring strongly about the finished product
- ♦ Feelings of inadequacy when viewing initial attempt
- ♦ Competitiveness and performance expectations
- ♦ Lack of product samples/ rubric to guide process of editing

(Kutner, 2004)

Product Creation

Process

Selecting writing genre to use: persuasive, opinion, expository or narrative

Drafting and editing: clarifying content and proofreading

Barriers for Students

- ♦ Personal and environmental organization
- ♦ Problem with paper based products
- ♦ End product – look and feel

Evaluation – Writing Production and Content

Process

Evaluation of Production: Efficiency of work – rate and accuracy

Evaluation of Content – writing style and organization

Quantitative Evaluation – raw scores, data, efficiency, rate, accuracy

Qualitative Evaluation – teacher evaluation, content, quality of written work

Obstacles to Overcome

- ♦ Lack of rubric/criteria for final editing, timely teacher assessment and self-assessment
- ♦ Lack of direct teaching in how to use the rubric

Role of Universal Design for Learning

- ♦ Curriculum materials/tools are designed for all students
- ♦ Students with diverse learning needs allowed to access and learn curriculum content - NIMAS
- ♦ “Applying Universal Design principles is the best way to ensure that all children, including those with disabilities, have equal opportunities to a high-quality education.”

David Rose of the Center for Applied Special Technology (CAST)

(Gordon, 2006)

Keys to Learning Success for All Students

- ♦ Accept, honor and respect the differences.
- ♦ Teach to learner strengths.
- ♦ Remove the obstacles and the “walls” that block access to and acceleration of curriculum content.
- ♦ Think beyond paper and pencil and “Outside the Box and Wires.”

The Power of Positive Thinking, Validation and Humor

- ♦ “Whether you think you can or cannot, you are right.”
- ♦ “You never know what you can accomplish until you try.”
- ♦ Power Thinking: I won’t, I can’t, I might, I can, I will, I did it!
- ♦ Acknowledge how difficult writing can be.
- ♦ Create a playful learning environment to promote creative thinking and flexibility.

WRITING in the digital age!

- No longer "pen on paper"
- Diversified
- Large range of technology tools, strategies, methods

This book was written by a friend I went to school in the third grade. His experience that he wrote was very close to mine even to the same area and time. His main experience was in a cleaning company whereas I was assigned to an infantry unit. This will you and your children something about the so called police action near our hut. Also is a photo of me and Scoutmaster Jim John awarding me the Korean War Medal. I you have any other questions...

Technology Tools to Remove Obstacles in Writing Production

Desktop computer / regular keyboard



Technology Tools to Remove Obstacles in Writing Production

Portable keyboards

- e.g. AlphaSmart
- Dana, Neo
- QuickPad Pro



Technology Tools to Remove Obstacles in Writing Production

PDA's

- e.g. Palm Pilot
- Pocket PC



Technology Tools to Remove Obstacles in Writing Production

Speech input for writing

- Speech recognition
- Voice recording



Technology Tools to Remove Obstacles in Writing Production

Digital voice recorders



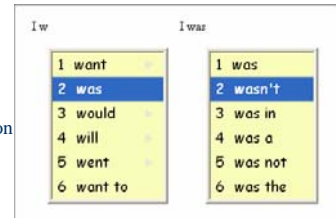
Technology Tools to Remove Obstacles in Writing Production

Alternate keyboards



Technology Tools to Remove Obstacles in Writing Production

Rate enhancement software - Word prediction, abbreviation-expansion



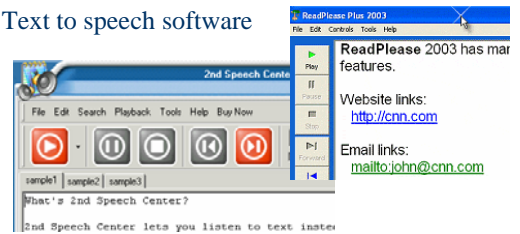
Technology Tools to Remove Obstacles in Writing Production

Onscreen keyboards
On computer and PDA



Technology Tools to Remove Obstacles in Writing Production

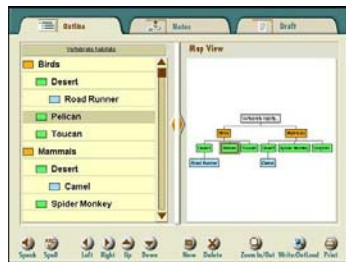
Text to speech software



Technology Tools to Remove Obstacles in Writing Production

Integrated software tools for training writing skills

e.g. SOLO



Technology Tools to Remove Obstacles in Writing Production

Writing support programs with multimedia features

e.g. Clicker 5, Classroom Suite



Technology Tools to Remove Obstacles in Planning



Digital Possibilities:

- ♦ Inspiration, SOLO – concept mapping for Windows and Palm OS
- ♦ Thought Manager - Palm OS
- ♦ Pico Map – Palm OS and Pocket PC
- ♦ Digital recorders

Engaging Students' Hearts and Minds with Digital Creativity

Digital-Based Options

- ♦ Digital storytelling
- ♦ Digital photography
- ♦ PowerPoint
- ♦ Podcasting
- ♦ Video production
- ♦ WebQuests
- ♦ Blogging

Tech Tools for Content and Writing Production Evaluation

Original Obstacles

Lack of rubrics and training to help students with editing and self-assessment

Digital Tools

- ♦ Rubristar – rubric maker
- ♦ SAGrader and MY Access! – online graders
- ♦ Custom Typing

Practical Application of Digital Diversity in Language Arts

Case Studies: Universally Designed Technology Provides Educational Equity for All Writers

Handheld and other technology tools in the gifted classroom for writing curriculum access and acceleration

Assistive Technology – “universally designed technology” provides accessibility for people with diverse needs in all classrooms

LESSONS LEARNED

- ♦ Accept, honor and respect the differences.
- ♦ Teach to learner strengths.
- ♦ Remove the obstacles and the “walls” that block access to and acceleration of curriculum content.
- ♦ Think beyond paper and pencil and “Outside the Box and Wires” whenever your students write.
- ♦ Create a digitally diverse classroom for true educational equity.
- ♦ Start the conversations and continue with collaboration.

Contact Information

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