Using No Tech, Low Tech and High Tech Tools to Increase Student Engagement

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Universal Design for Learning

Learning Opportunities for All

CLEARING A PATH
FOR PEOPLE WITH SPECIAL NEEDS
CLEAR THE PATH FOR EVERYONE!
FOR A FAIR SELECTION EVERYBODY HAS TO TAKE THE SAME EXAM: PLEASE CLIMB THAT TREE
What is UDL?

The term **Universal Design for Learning** means a scientifically valid framework for guiding instruction that:

° (a) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and

° (b) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient
UDL Framework:

**Representation**
- Provide options for perception
- Provide options for language, mathematical expressions, and symbols
- Provide options for comprehension

**Action & Expression**
- Provide options for physical action
- Provide options for expression, and communication
- Provide options for executive functions

**Engagement**
- Provide options for recruiting interest
- Provide options for sustaining effort and persistence
- Provide options for self-regulation
UDL is Multiple Means of:

Representation of Learning

WHAT?
UDL is Multiple Means of:
Action & Expression

HOW?
of Learning

“I expect you all to be independent, innovative, critical thinkers who will do exactly as I say!”
UDL is Multiple Means of:

Engagement

WHY? of Learning

"That was an awesome worksheet," said no student ever.
Why is Low Tech UDL important?

- Universal Design for Learning does not mean technology!
Movement in the Classroom
Hands on Activities

- Possible in all Subject Area
Hands-On Activities

Building Roller Coasters in Science
Hands on Activities
Giving Options

- Writing
- Seating
- Books
Guided Notes

Types of Verbs notes

I. What is a verb?
   • A verb is a word used to express an ____________, a ____________, or a ____________, or a ____________. The three types of verbs are: ____________, ____________, and ____________.

II. Action verbs (from _______ Verbial)
   • An action verb tells what the ____________ does.
   • Action verbs can be ____________ or ____________.

   Mr. Hoffmann’s examples: to jog, to call, (physical) Everyone runs a rainy day, (mental)

   Your examples:

   ____________

III. Linking verbs (from _______ Verbial)
   • Linking verbs connect ____________ to ____________ that define/describe them.
   • Mr. Hoffmann’s matchmaking Link Verbian friend: ____________
   • The oddballs:

   "To tell if a verb is a linking verb, let ____________ do the work!"

IV. Helping verbs
   • Helping verbs help main verbs express ____________ of ____________. They can’t stand ____________, though! When they team up with an ____________ verb, they form a ____________ ____________.

   Mr. Hoffmann’s examples: Not Yes, Cathy, I did finish my geography project!

   Your example: ____________
Goal Setting

Morning Check-In
Check-In
What materials do I need in class today? (pencils, books, assignments, etc.)?

_____________________________________________
What is my goal/plan of action for today? tonight?

_____________________________________________

Student Signature: ________________________________

Teacher Signature: ________________________________

Parent Signature: ________________________________

Afternoon

What materials do I need to bring home?

_____________________________________________
What is my goal/plan of action for tonight?

_____________________________________________

Student Signature: ________________________________

Teacher Signature: ________________________________

Parent Signature: ________________________________
Mnemonics

Geography -
Big Gorillas Eat Hotdogs Not Cold Pizza
(Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama)

Language Arts -
FANBOYS
(for, and nor, but, or, yet, so)

Math -
Please Excuse My Dear Aunt Sally
Parenthesis, exponents, multiplication, division, addition, subtraction

How to Divide!
- Does
- McDonald's
- Cheese
- Burgers
- Raw?

1. (divide)
2. (multiply)
3. (subtract)
4. (check)
5. (bring down)
6. (repeat or remainder)
Mnemonics

Science:

ROY G. BIV
red, orange, yellow, green, blue, indigo, violet

SERVED US NINE PIZZAS
JUST MOTHER EDUCATED VERY MY

XKCD presents:
A few science mnemonics

ORDER OF OPERATIONS
Parentheses, Exponents, Division & Multiplication, Addition & Subtraction

TAXONOMY
Kingdom, Phylum, Class, Order, Family, Genus, Species

PLANETS
Mercury Venus Earth Mars Jupiter Saturn Uranus Neptune
Words Their Way (WTW)

- developmental spelling, phonics and vocabulary program K-12
- core or supplemental curriculum
- The purpose of word study (which involves examining, manipulating, comparing, and categorizing words) is to show logic and consistencies within written language
Word Sort
More Low Tech Ideas....

- Closed-Captioning on movies/videos
- Fidgets
- Reading Guides
- Highlighted Textbooks
- Large Print
- Graphic Organizers
YouTube Channel

https://www.youtube.com/user/pasmrswajer
Reading Eggs

Where children learn to read!
Highlights of IXL

- **Comprehensive coverage** of K–12 math and language arts curricula.
- **Alignment to the Common Core**, DoDEA, and all state standards.
- **Insightful reporting** that tracks student progress.
- **Professional development** for site license schools.
- **Wide variety of question types**, from word problems to interactive graphing.
- **Unlimited access** to all grade levels.
- **Virtual prizes** and awards to celebrate learning milestones.
Read and Write Gold

Drag your favorite items into the toolbar...

...or drag the default set into the toolbar.

Show Icon Only □ □ Uncheck Use small size

Done
The Snow Queen

FIRST STORY. Which Treats of a Mirror and of the Splinters

Now then, let us begin. When we are at the end of the story, we shall know more than we know now: but to begin.

Once upon a time there was a wicked sprite, indeed he was the most mischievous of all sprites.

One day he was in a very good humor, for he had made a mirror with the power of causing all that was good and beautiful when it was reflected therein, to look poor and mean; but that which was good for nothing and looked ugly was altered, magnified, and increased in beauty. In this mirror...
Volcanoes

A volcano is a mountain on the surface of the earth (and other planets) where magma from deep within the planet accumulates. As the magma interior erupts (or once erupted) to the surface, it forms a volcano. Roughly defined, a volcano consists of a magma chamber, pipes, and vents. The magma chamber is the magma from deep within the planet that accumulates, while surface vents, openings in the volcano's surface, allow gases to escape during an eruption. Some volcanoes produce material that is dense and flows as a fluid, whereas other types of volcanoes form a material that is light and rises in a column-like structure, other types of volcanoes form a material that is dense and flows as a fluid.
Prodigy

Student Progress By Topic And Strand

Student Progress By Strand

Student Report for MatthewB

Number Sense and Numeration

<table>
<thead>
<tr>
<th>Skill</th>
<th>Time Spent</th>
<th># Questions</th>
<th>% Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1 Counting forward by 1s to 100</td>
<td>55 Seconds</td>
<td>4</td>
<td>75.00</td>
</tr>
<tr>
<td>Grade 1 Counting forward by 2s to 100</td>
<td>26 Seconds</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Grade 1 Counting with images</td>
<td>10 Seconds</td>
<td>1</td>
<td>100.00</td>
</tr>
<tr>
<td>Grade 1 Ordering Numbers 0-50 (least-greatest)</td>
<td>51 Seconds</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Grade 1 Writing words in numbers to 10</td>
<td>5 Minutes</td>
<td>22</td>
<td>45.45</td>
</tr>
<tr>
<td>Grade 1 Writing numbers in words to 10</td>
<td>34 Seconds</td>
<td>17</td>
<td>84.12</td>
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</tbody>
</table>

Measurement

<table>
<thead>
<tr>
<th>Skill</th>
<th>Time Spent</th>
<th># Questions</th>
<th>% Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1 Compare objects with measurable attributes (longer or shorter; bigger or smaller)</td>
<td>21 Seconds</td>
<td>4</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Student Reports

Get the data about your students' progress that really matters.

Class Trouble Spots by Skill

- Subtract two digit numbers to 99, regroup
- Add two digit numbers to 99, no regrouping
- True false addition equality expressions
- Subtract two digit from three digit, regroup
- Determining missing number in a subtraction
- Counting forward by 2s to 100
At the beginning of the school year there were 561 pencils in your classroom. 324 of these pencils were lost and 285 more were bought. How many pencils are there now?

\[
\begin{align*}
561 & - 324 \\
237 & + 285 \\
522 &
\end{align*}
\]
Study Island

Animations

Virtual Labs

Educational Videos
2-Dimensional Objects

1. Which of the following shapes is a square?

A. 
B. 
C. 
D. 

Antonyms, Synonyms, and Homonyms

1. Directions: Select the correct text in the story.

Which word in the passage is an antonym for the word ordinary?

Randy met his new neighbor, Mr. Raab. Randy learned that Mr. Raab is an outstanding person. Mr. Raab is a Holocaust survivor from Poland. In 1940, he came to the United States. Soon after, he joined the U.S. Navy. In 2005, he survived Hurricane Katrina in New Orleans where he waited for several exhausting days in his horrifying apartment to be rescued. Randy knew that he would enjoy getting to know Mr. Raab and hearing his humbling stories.

END STUDY SESSION

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The article says, "Most cars weigh between 3,000 and 4,000 pounds and can go over 100 miles per hour. If someone loses control of something weighing that much and going that fast, it can cause a lot of damage and put people’s lives in danger." It describes the weight and possible speed of cars to show how dangerous they can be. The author includes the detail about speed to show that driving can be dangerous.

Certainty can be fun, but driving a car is also a serious responsibility.

Most cars weigh between 3,000 and 4,000 pounds and can go over 100 miles per hour. If someone loses control of something weighing that much and going that fast, it can cause a lot of damage and put people’s lives in danger. Driving requires a great deal of training and knowledge.

At the age of sixteen, many young people enter driver’s education classes. Some of these young people already know much about driving. Some know almost nothing. All of them, however, will find these classes useful. The classes cover a great deal. They are more than just driving lessons. Students learn the rules and laws of driving on public roads. They learn how to operate different types of automobiles and how to properly maintain a vehicle.

Being able to drive is fun, but everyone must remember to receive the proper training before giving driving a try. Lots of practice and training make driving most cars, especially newer cars, safe and easy.

1. The author included the detail that most cars "can go over 100 miles per hour” to show that
Study Island
myOn Reader

- Unlimited access to more than 8,000 enhanced digital books with multimedia supports, real-time assessments, and close reading tools
- Fiction and informational books at all instructional levels