Blended Learning: What, Why and How

Steven Floyd – M.Ed.

High School Computer Science and Computer Engineering Teacher - LDCSB

Lead Mentor FIRST Robotics

Lead Teacher SHSM – ICT

Recipient of 2016 Award for Teaching Excellence in Computer Science
(from Infosys Foundation USA, ACM, the Association for Computing Machinery and
CSTA,Awards for Teaching Excellence in Computer Science)

sfloyd@ldcsb.ca   @stevenpfloyd

Blended Learning – Why This Topic…

The Chromebooks are coming!

Thames Valley school board to test free Chromebooks for Grade 9 students at eight schools

By Hank Daniszewski, The London Free Press
Monday, April 3, 2017 3:23:34 EDT PM

Blended Learning – Why This Topic

"Blended" won't really be a word anymore.

~~Online world~~
~~Offline world~~

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Blended Learning – Why This Topic

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Photocopying Budgets

Textbook Budgets

Blended Learning – Why This Topic

All teachers will be blended learning teachers.
Are we ready?

Blended Learning – Why This Topic

What 21ˢᵗ century skills did you need to attend this conference?
Register online? Access website and agenda?
Social Media planning? Downloading slides?
Emailing, tweeting, messaging, presenters, colleagues?
Requesting time away?

What would be a good way to develop these
skills in our students?

Blended Learning – Why This Topic

This conference is blended!

Our careers are blended!!

Our life is blended!!!

The whole world is blended!!!!

A valuable and authentic way to embed
21st century skills and competencies into every classroom

Blended Learning – Why This Topic

I do it

I love it

I believe it is important for students

Our Work

```
package premiershipdemo;

import java.io.*;

public class PremiershipDemo {

    public static void main(String[] args) {

    String valueReadS;
    int valueReadI;
    int total;
    int firsthalf;


    firsthalf = 0;
    secondhalf=0;
    total = 0;

        try

        {FileReader file = new FileReader ("goalsTrial.in");
        BufferedReader buffer = new BufferedReader(file);

        while ((valueReadS = buffer.readLine())!=null)

        {
            valueReadI = Integer.parseInt(valueReadS);
            total=total+1;
            if (valueReadI <= 45)
            {firsthalf= firsthalf + 1;}
            else
            {secondhalf=secondhalf + 1;}

        }
        }
        catch(IOException e)
        {System.out.println ("Sorry, file not found");}

        //OUTPUT YOUR DATA TO THE SCREEN

    }
}
```
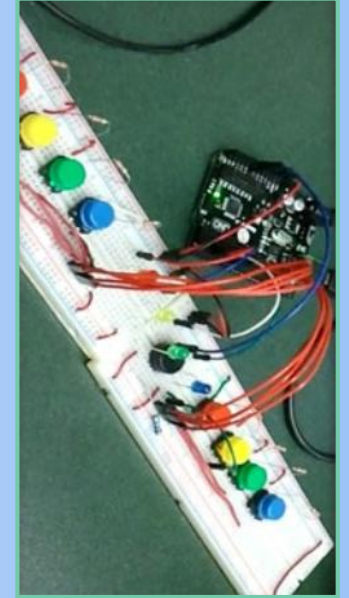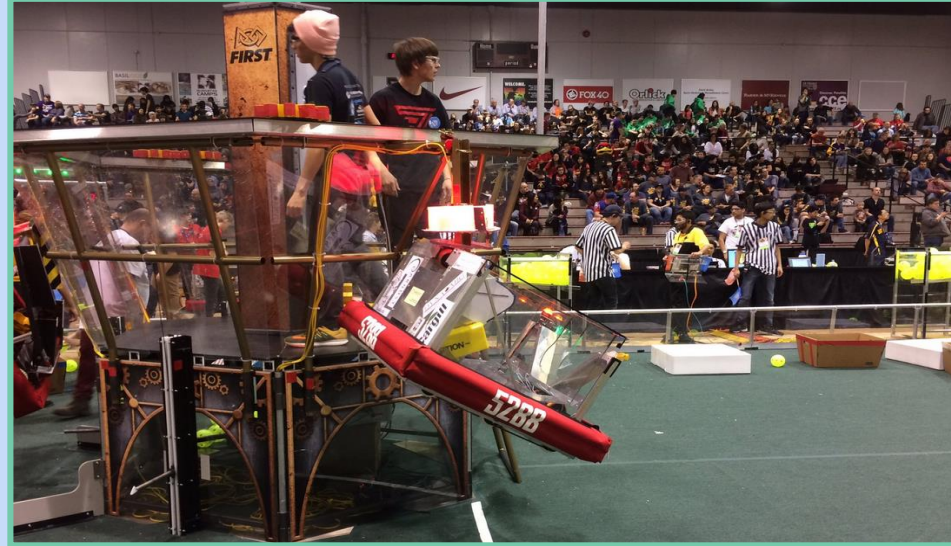
Our Classroom

Our Classroom…

Large gaps in students achievement, prior knowledge, interest

Very project based, hands on, creative, innovative, extending assignments

A variety of technologies provide different contexts for curriculum
(Raspberry Pi, Lego NXT, Arduino, FIRST Robotics, JAVA, Python, Bricx, HTML, CSS)

A number of students bringing their own laptops, phones, etc.

A number of students deciding "THIS IS WHAT I WANT TO DO WITH MY LIFE!"

Sometimes large gaps in student motivation…
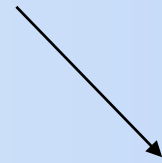
Sometimes a group of introverted, quiet individuals…

Blended Learning

Traditional Classroom
In a classroom
Face-To-Face
Bricks and Mortar

Online Classroom
Uses a Virtual Learning Environment
Teacher never meets students
No "in class time"

Blended Classroom
Uses a Virtual Learning Environment
Teacher never meets students
No class time

Blended Learning - Acronyms

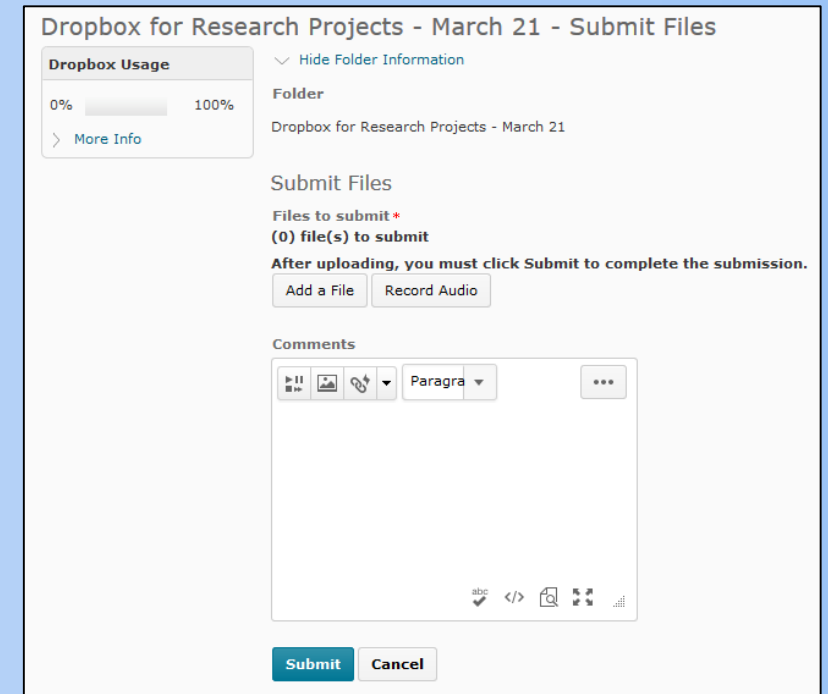LMS – Learning Management System
VLE – Virtual Learning Environment

Brightspace – a specific VLE created by D2L (Desire to Learn).
  Ministry provided, all Ontario Boards have access

Blended Learning – Tools
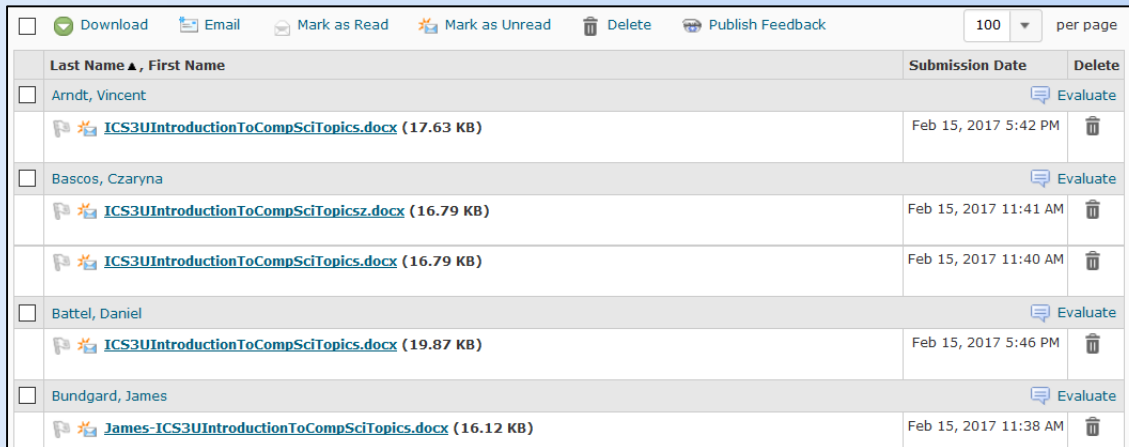
A Dropbox (assignment submission area)

- Student name attached to submission
- Can submit a variety of file types
- Some VLEs allow for plagiarism checks (turnitin)
- Can be opened and closed at specific dates and times
- Date and time stamped

Dropbox for Research Projects - March 21 - Submit Files

Dropbox Usage

0% [_____] 100%

> More Info

⌄ Hide Folder Information

Folder

Dropbox for Research Projects - March 21

Submit Files

Files to submit *
(0) file(s) to submit
After uploading, you must click Submit to complete the submission.

[Add a File] [Record Audio]

Comments

[Submit] [Cancel]

Blended Learning – Tools

A Dropbox (assignment submission area)

- No paper coming in
- All assignments in one place
- Accessible from anywhere
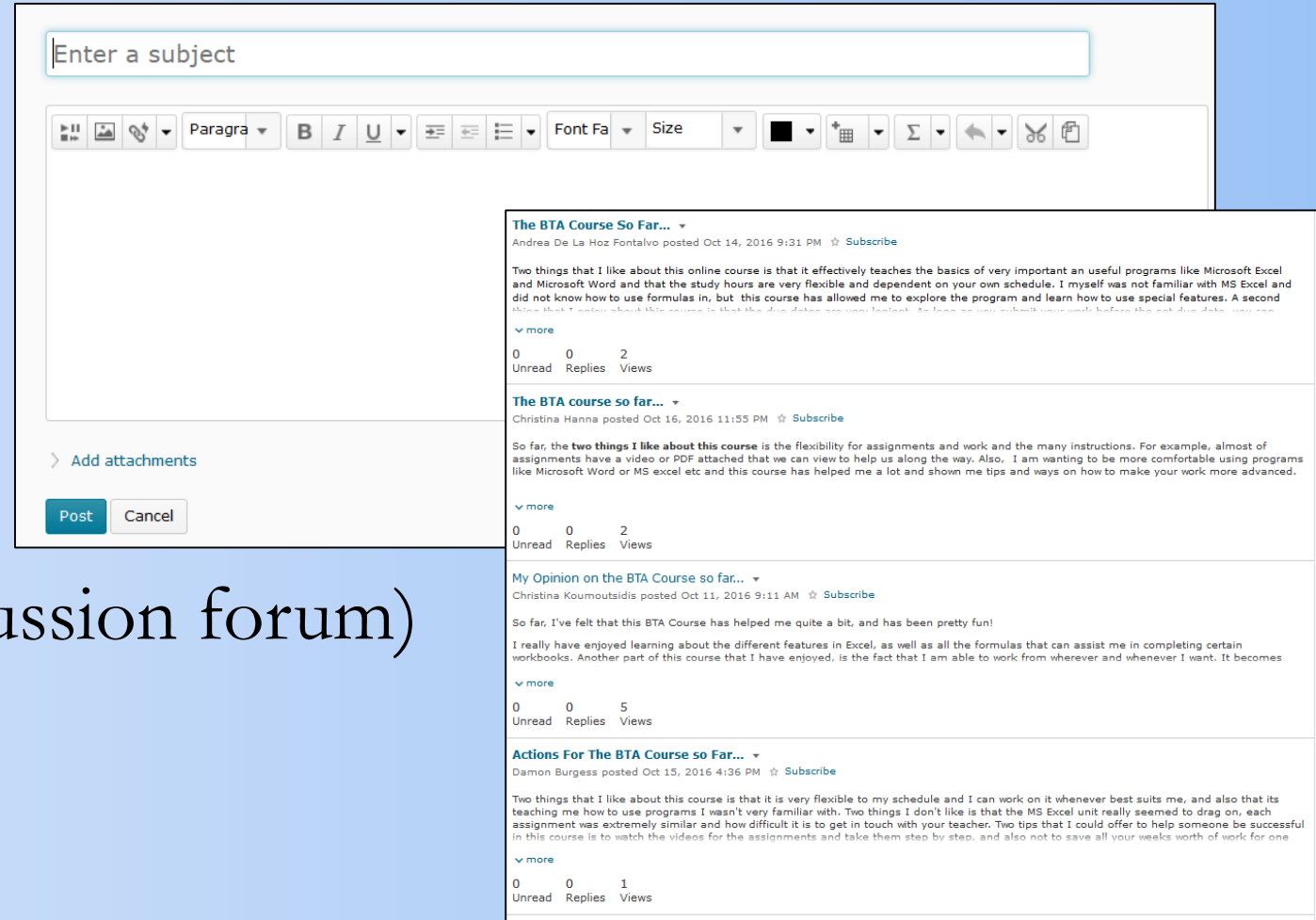- Definitive closing time for assignments
- Definitive proof of submission (PT Interview….)

Blended Learning – Tools

- Student name attached to all posts
- Files can be attached
- Students can respond to each other
- Students can see each the attached files of others

A Discussion Area (online discussion forum)

Blended Learning – Tools

- Collaboration
- Cross curricular content (Int. Bus.)
- More welcoming platform for sharing for some students

A Discussion Area (online discussion forum)

Blended Learning – Tools

But what about inappropriate posts?

- More accountability than traditional classroom
- Screen captures
- Valuable development of online skills and etiquette in a low risk, contained environment

Enter a subject

Mr Floyd is a $%&!!#@#$

Add attachments

Post   Cancel

Blended Learning – Tools

- Auto Marking
- AUTO MARKING!!!!!!!
- Variety of question types
- Can be timed
- Multiple or single trials
- Opening and closing date and time
- Can randomize questions

Quiz or Survey Tool

Blended Learning – Tools

Quiz, Survey Tool
My favourite part..

- AUTO MARKING!!!!!!!
- Data

Blended Learning – Tools

Locker, File Storage, ePortfolio

- Cloud storage for course files
- Ability to revisit/reuse past work
- Ability to showcase/combine work
- Ability to document learning, reflect, etc

Blended Learning – Tools

Content

- Can provide a variety of file types
- Can provide links to external documents
- Online textbook
- All course materials… one place…
  from syllabus to exam review

Blended Learning – Tools

Content - OERB

- A wide variety of courses, written in their entirety
- Can be imported into any course
- Can be used as a whole, in parts, etc.

Blended Learning – Tools

News

- Daily agenda for all students
- Can link to past work, other documents, content
- Can be set to publish at specific day/time

Blended Learning - Why

What they want to know

Me?

What they know

Blended Learning - Why

Blended Learning

Differentiation

- Learning Styles
- Interests
- Areas of Focus
- Personalities

Blended Learning

Paper and $$$
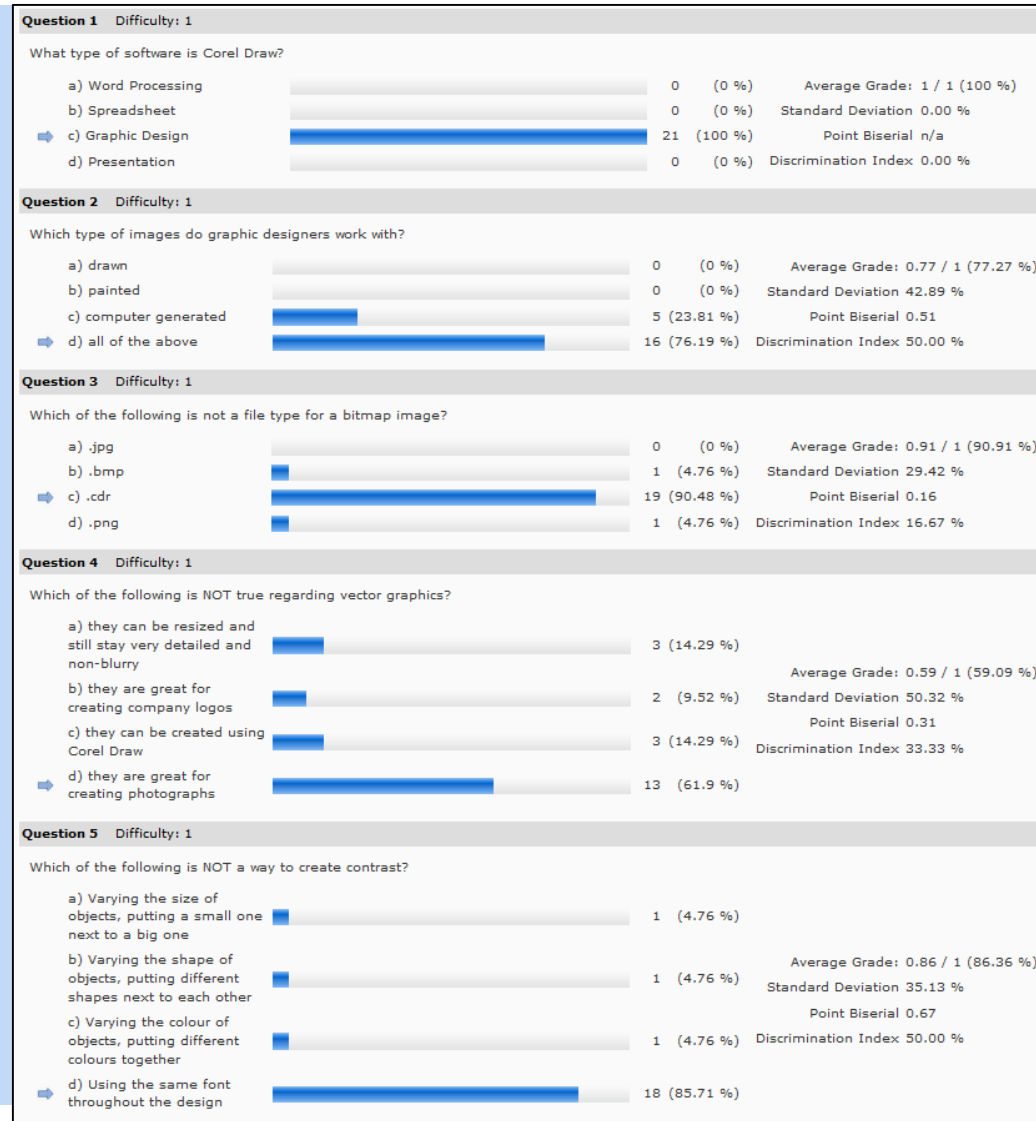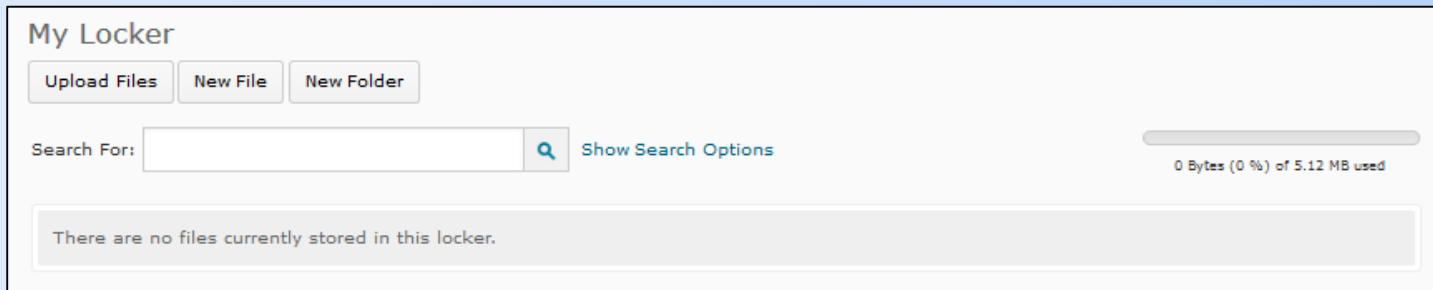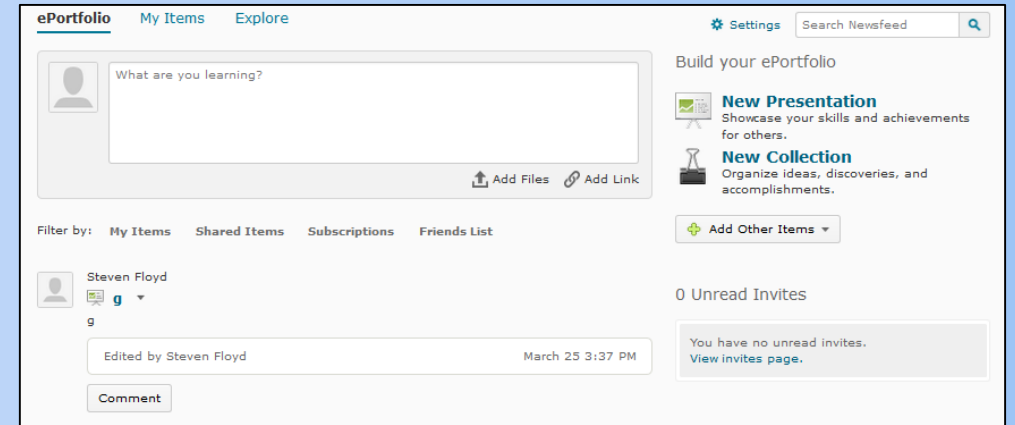
Title		Start Date	End Date	Status
☐ **T-A-24** ▾		Apr 24, 2017 2:06 PM	-	Published
PROJECT				

I/O, I/O, it's off to work you go!

Now that you have started to become familiar with using programming concepts including variables, loop, selection, arrays, sorting and IO...it is time to create your own program that uses Input and Output.

In this assignment, you will have the privilege (and responsibility) of creating a program of your choice. You should try to get your program to include the following:

✓ Read in information
✓ Display data to the screen
✓ Use existing data to create new data
✓ Alter or change some of the data
✓ Output data

Essentially you are creating a data base containing whatever information you wish.

You will have several days to complete this program.
If you can work with datafiles, that is great! If you want to work with keyboard input, that will work as well. The more complex, the better.

Some ideas include:
- A program that keeps track of the stock at a store
- A program that keeps track of statistics for a team or a league (league standings)
- A program that keeps track of usernames and passwords, with the ability to add new usernames and passwords
- A diet program with calorie counters (data file could store food names and calories)

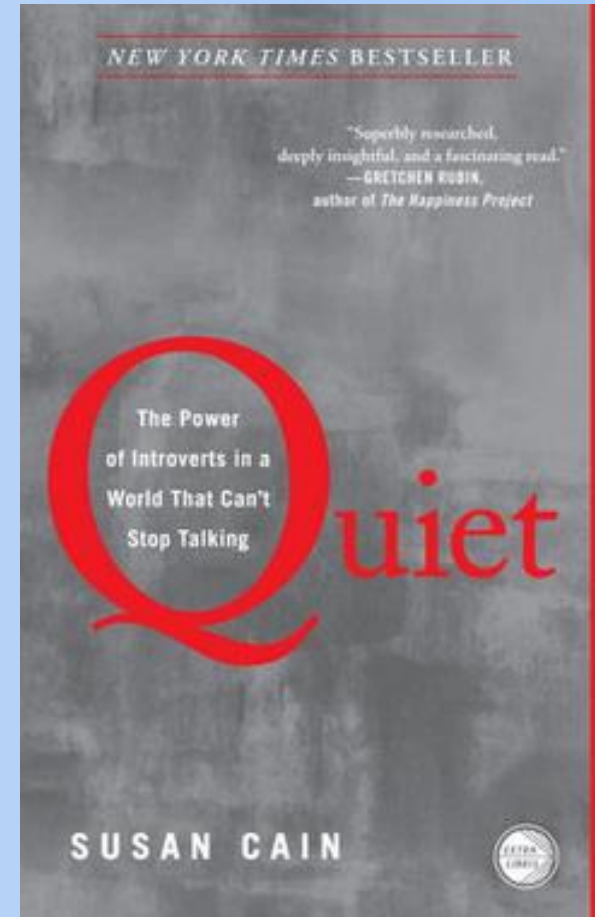|	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Application Loops, arrays, input output are all used effectively and with complexity	Loops, arrays, input output are all used with limited effectiveness and complexity	Loops, arrays, input output are all used with some effectiveness and complexity	Loops, arrays, input output are all used with considerable effectiveness and complexity	Loops, arrays, input output are all used with thorough effectiveness and complexity
Application Design and debugging of program completed effectively and with complexity	Design and debugging of program completed with limited effectiveness and complexity	Design and debugging of program completed with some effectiveness and complexity	Design and debugging of program completed with considerable effectiveness and complexity	Design and debugging of program completed with thorough effectiveness and complexity
Thinking/Inquiry User interface is designed effectively and with complexity	User interface is designed with limited effectiveness and complexity	User interface is designed with some effectiveness and complexity	User interface is designed with considerable effectiveness and complexity	User interface is designed with thorough effectiveness and complexity
Communication Spacing, headers and comments allow for understanding of program	Spacing, headers and comments allow for limited understanding of program	Spacing, headers and comments allow for some understanding of program	Spacing, headers and comments allow for considerable understanding of program	Spacing, headers and comments allow for thorough understanding of program

Blended Learning

Absences
- Student ("What'd I miss?", "Did we do anything yesterday?")
- Teacher

☐ **T-A-11** ▼   Apr 11, 2017 8:21 AM   -   Published

Nice job yesterday, almost everyone in the class ended up being able to read Strings from a datafile into a program.
This will be HUGE for the rest of the course.

Today we are going to read integers from a data file and then read doubles from a data file.

Follow these instructions closely, it's very important that you get these done today in preparation for tomorrow and the rest of the year...

Reading Integers from a Datafile

Reading Doubles from a Datafile

Blended Learning

Flow, Routine to Daily Class time

- Students enter, log in, complete initial task…
- Efficient, productive, less time wasted…
- Students who are away can access materials, no wasted time on return

Blended Learning

Helps meet specific demands of today's classrooms:
- Split grades, courses
- Differentiation
- Absences

Blended Learning

Platform for flipped classroom

Blended Learning

Student accountability
Student responsibility

Blended Learning

More doing

Blended Learning

Flexible
Responsive

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