

Middle Years PAA
Computer Drafting Module
Using Class Notebook
Craig Vanthuynne

In an effort to incorporate Blended Learning Strategies into my PAA 6/7 class I investigated multiple interface options including Moodle and Class Notebook. After consulting the Technology Coaches, a decision was made to use OneNote Class Notebook, as the grade 6/7 class had just been introduced to their Sun West email and having one access location was ideal. OneNote is an extension of the Sun West email and thus could be accessed from anywhere. In addition, OneNote Class Notebook allows me to see all student work. Students only have access to their own work and work in the shared workspaces. Google Sketchup was used as the CAD program. This program is available for free download, thus students could have the program at home.

Thank you to Dan Marsh for providing YouTube links, Assessment, Evaluation and Outcome information.

<https://www.youtube.com/watch?v=hMmRud4B54o> for an introductory video on using OneNote in classrooms.

The screenshot shows the OneNote Class Notebook interface. At the top, there is a navigation bar with 'FILE', 'HOME', 'INSERT', 'DRAW', 'HISTORY', 'REVIEW', and 'VIEW'. Below this is a ribbon with 'PAA 6-7' and 'START HERE' tabs, followed by several workspace tabs: '_Collaboration Space', '_Content Library', 'Abrie Hayes', 'Aiden Medcoff', 'Aleksandr Kozak', and 'Bree OConnor'. The main content area displays a welcome message: 'Welcome to the OneNote Class Notebook' and 'OneNote is your very own digital notebook'. A link to 'Watch the 2 minute video' is provided. Below this, a list explains the three parts of the notebook: 1. **Student Notebooks** -- a private notebook shared between the teacher and each individual student. Teachers can access every student notebook, while students can see only their own. 2. **Content Library** -- a read-only notebook where teachers can share handouts with students. 3. **Collaboration Space** -- a notebook for everyone in your class to share, organize, and collaborate. A diagram below the list shows an open notebook with three sections: 'Content Library', 'Student Notebooks', and 'Collaboration Space'. To the right of the diagram is a hand-drawn illustration of a whiteboard with a math problem: $\lim_{n \rightarrow \infty} \sum_{k=1}^n 3(1+\frac{1}{k})^{\frac{1}{k}}$ and a note that says 'this will be on the exam!'. The right sidebar shows a search bar and a list of pages: 'Welcome to the OneNote Class N', 'ASSESSMENT', and 'OUTCOMES of PAA 6/7- Drafting'.

Assessment that and Evaluation Overview

Grades 6-9 are graded on what is called Rubric Scores. The focus on these scores is to move you away from judging your work on a number and having you read the criteria of what you did well and what you can improve upon. Your marks are different than high school marks.

You will be assessed using:

- **Formative Learning Activities:** Checklists are used to track the daily practice activities. As you practice the outcome and hand in assignments your activity will be checked for completion and to see if further instruction should be done to assist with understanding of the outcome. These do not count to a final grade
- **Formative Assessments** – Feedback will be given by comments on these learning activities, but no grade would be assigned.
- **Summative Assessments** – Rubrics are used to assess the understanding of the outcome based on an assignment/project/activity. These will count to a final grade.
- **Final Mark** – A Rubric Rating Scale will be used to provide a final grade which will appear on your report card.
- **Learning Behaviours** – Rubrics will give you feedback on your learning behaviours. These are not part of assessing or evaluating your final grade, however they may help you understand what you could improve in your effort and organization, which may improve your assessments.

You will be assessed using a Rubric Rating Scale. You will get a score from 1-5. Here is what those scores mean:

Level 5 – WOW – 5s are very difficult to achieve because they refer to work that has soared so far beyond the requirements that you could perform at nearly professional level. Set this as a goal once you feel you have mastered the topic and you want to challenge yourself.

Level 4 – Excellent – I always tell students that my goal for them is to be a 4. 4 means you have reached excellence for your grade level. I would set this as your goal if you find the course manageable.

Level 3 – Good – Achieving a 3 means you have performed the requirement. Set this as your goal if you are struggling. Ask for help when you want to push to the next level.

Level 2 – Just Beginning – I interpret a 2 to be that you are meeting the requirement some of the time. If you find yourself getting a lot of 2s, it could mean either:

- You are rushing through and not putting the effort in
- You are struggling and need to ask your help

Level 1 – Not there at all – If you are getting a 1 it means you are completely lost or you are disinterested in doing well. At this stage I will be concerned about you and will be talking to your parents because I care about you doing well.

General Rubric Rating Scale PAA 7:

Score	Teacher Rubric	Student-friendly Rubric
5 – WOW!!!!	<ul style="list-style-type: none"> ✓ Thorough and insightful understanding of the learning outcome ✓ Exceptionally confident practical application with high-achieving representation of the learning outcome ✓ Regularly applies the concepts learned to innovative personal projects. ✓ Has learned aspects of the program not specifically taught. 	<ul style="list-style-type: none"> ✓ I can take what I am learning about drafting and apply it to my own personal projects that go beyond what is expected. ✓ I have played with the program and taught the teacher a few tricks. ✓ The drafts I create are perfect and could be used by professionals.
4 – Excellent!	<ul style="list-style-type: none"> ✓ Clear and comprehensive understanding of the learning outcome ✓ Confident practical application with excellent representation of the learning outcome 	<ul style="list-style-type: none"> ✓ I understand the information I am learning about drafting so well that I can assist others in their learning ✓ I can take what I am learning about drafting and apply it with no assistance. ✓ The drafts I create are very detailed and precise.
3 – Good!	<ul style="list-style-type: none"> ✓ Basic and grade-appropriate understanding of the learning outcome ✓ Adequate decision-making with good representation of the learning outcome 	<ul style="list-style-type: none"> ✓ I understand the information I am learning about basic drafting ✓ I can take what I am learning about drafting and apply it with little assistance. ✓ The drafts I create are detailed and usually precise
2 – Just Beginning	<ul style="list-style-type: none"> ✓ Inadequate understanding and inconsistent decision-making with inconsistent representation of the learning outcome due to either: <ul style="list-style-type: none"> ○ Lack of effort ○ Lack of understanding 	<ul style="list-style-type: none"> ✓ With assistance I understand most of the information I am learning about basic drafting ✓ My drafts are inconsistent ✓ The drafts I create do not represent what I am trying to represent. I need to decide if it is time for me to: <ul style="list-style-type: none"> ○ Put more effort in ○ Ask for help
1 – Not there at All	<ul style="list-style-type: none"> ✓ No understanding and no confidence in decision-making with weak or no representation of the learning outcome. 	<ul style="list-style-type: none"> ✓ I cannot grasp the drafting concepts and my ability to work with the program is limited. I need to seek out and accept help.

PAA 7 – learning Behaviours

Rubric: Effort and Organization – Projects, Assignments, Exams

Score	Criteria
C - Consistently	<ul style="list-style-type: none">✓ I have followed all of the criteria expected of me✓ I have paid careful attention to presentation of my work, neatness and/or I have followed instructions perfectly to create the product asked of me✓ I have handed in or created something I am proud of✓ I handed this in on time and/or created it in the time allotted
U - Usually	<ul style="list-style-type: none">✓ I have missed 1-2 areas of the criteria expected of me✓ I have paid careful attention to presentation of my work, neatness and/or I have followed instructions perfectly to create the product asked of me for 80% of my work✓ I handed this or created it within a day of when it was due
S - Sometimes	<ul style="list-style-type: none">✓ I have missed 3-4 areas of the criteria expected of me✓ I have paid some attention to presentation of my work, neatness and/or I have followed instructions perfectly to create the product asked of me for 60% of my work✓ I handed this in or created it within a week of when it was due
R - Rarely	<ul style="list-style-type: none">✓ I have missed more than 4 areas of the criteria expected of me✓ I have paid no attention to presentation of my work, neatness and/or I have followed instructions perfectly to create the product asked of me✓ I handed this in or created it more than a week late after reminders from my teacher.



Outcomes – Drafting

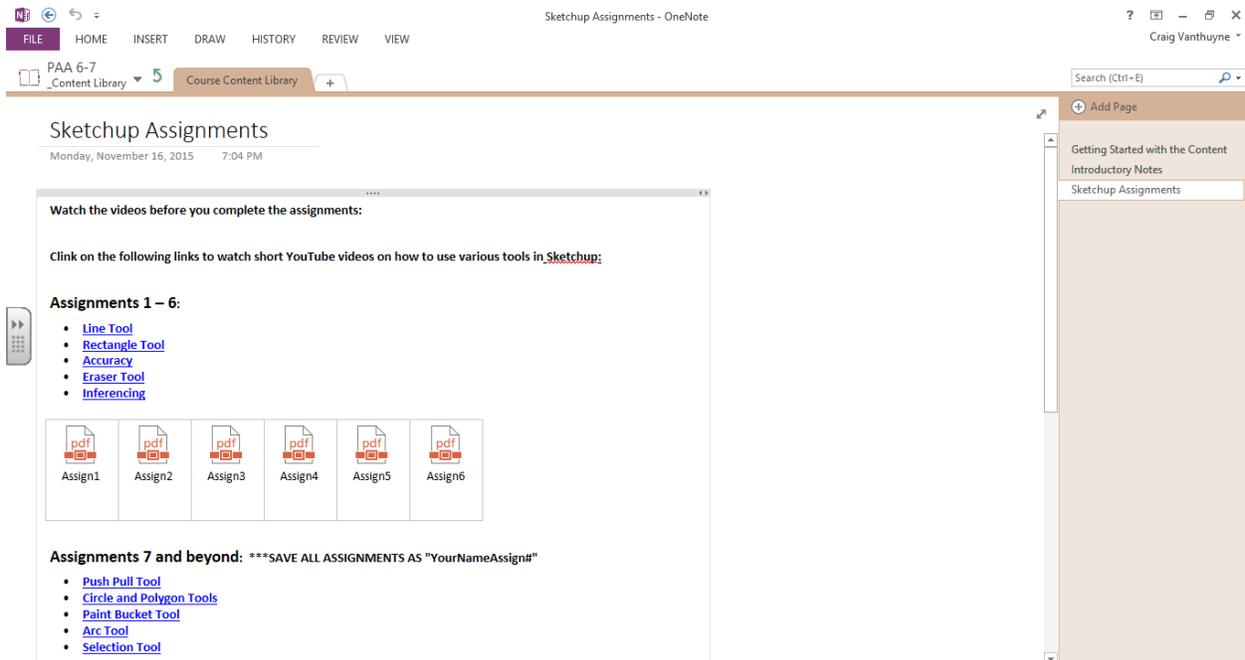
Use computer assisted drafting software (Google SketchUp) to create single view and 3D drawings.

- **Module 1 – Objectives 1.1 – 1.3, 1.6, 1.10**

- **1.1 To create CAD files and draw basic elements in the file**
 - *Able to open and create a SketchUp file*
 - Can draw the fundamental elements – lines, circles, arcs, and polygons
- **1.2 To manipulate elements in the CAD file**
 - Demonstrates locating and using some of the manipulation tools such as: move, delete, copy, copy parallel/offset, rotate
- **1.3 To use the various view controls**
 - Able to locate and use the zoom in, zoom out, window area and pan tools
- **1.6 To draw objects to an exact size**
 - *Understands how to draw* basic elements (lines, arcs, circles, and rectangles) to an exact
 - Able to combine basic elements to create shapes
- **1.10 To use terminology in context**
 - Able to understand and define terms such as: perpendicular, parallel, radius, and diameter.

- **Module 8 – Objectives 8.1 – 8.4**

- **8.1 To create a 3D file**
 - *Able to create a 3D file in SketchUp*
- **8.2 To produce a slab or block in a 3D file**
 - Demonstrates creating a block using the Push/Pull manipulation tool
- **8.3 To create holes in the slab or block**
 - Able to create holes using the circle and Push/Pull manipulation tools
- **8.4 To create protrusions and cuts on the slab or block**
 - Able to create protrusions and cuts using various manipulation tools



The Content Library, accessible as a read only to all students, houses links to instructional YouTube videos as well as the assignments and general instructions. Students saved finished assignments in their own tab of the program which were accessible by me for assessment purposes.

REFLECTION:

The desktop version of OneNote provided the most flexibility within the program however it limited the “anywhere, anytime” concept. The online Office 365 version allowed students to access the course from home with relative ease but made saving their assignments difficult. Overall, students learned quickly how to maneuver through the platform, however some students continue to struggle. Pre-teaching of email skills and Office 365 familiarity is imperative!