

ANALYSIS OF STUDENT LEARNING

EXEMPLARY



FEINSTEIN SCHOOL OF EDUCATION AND HUMAN DEVELOPMENT

Exit Portfolio School Analysis Scoring Rubric

Name: _____ Student ID #: 0221659
Telephone #: _____ E-Mail: _____

Teacher Preparation Program: Secondary Education Major/Concentration: Technology Education

Assess the extent that the candidate has **achieved** the following Rhode Island Beginning Teacher Standards in the school analysis. Rate the candidate's performance 1 (an area of weakness) to 4 (an area of strength) for each Standard.

		Weakness	Developing	Competence	Strength
1.	The school analysis provided evidence of school-wide data that reflect the school's understanding (or lack of understanding) of how children learn and develop. (RIBTS 3)	1	2	3	4
2.	The school analysis provided evidence of school-wide data that reflect the school's understanding (or lack of understanding) of how students differ in their approaches to learning. (RIBTS 4)	1	2	3	4
3.	The school analysis provided evidence that an effective learning environment was (or was not) created in the school such that positive social interaction, active engagement in learning, and self-motivation are (are not) evident. (RIBTS 6)	1	2	3	4
4.	The school analysis provided evidence of collaboration among teachers, staff, and families to support student learning. (RIBTS 7)	1	2	3	4

Comments:

Signature of Evaluator Farinella

Date 5/9/08

Performance Indicators

RIBTS 3: Teachers create instructional opportunities that reflect an understanding of how children learn and develop.			
Weakness	Developing	Competence	Strength
Displays minimal knowledge of developmental characteristics of learners or fails to activate students' prior knowledge.	Designs lessons that demonstrate some awareness of students' prior knowledge and developmental needs; is overly reliant on didactic approaches to learning.	Designs activities that demonstrate an awareness of prerequisite knowledge, learning style and divergent thinking of students.	Learners are stimulated to think and test ideas that include deliberate opportunities to discover the connections between ideas.

RIBTS 4: Teachers create instructional opportunities that reflect a respect for the diversity of learners and an understanding of how students differ in their approaches to learning.			
Weakness	Developing	Competence	Strength
Conveys modest expectations for achievement, fails to seek supplementary materials, or is unaware of individual learning abilities and the impact of cultural background on learning.	Demonstrates occasional success in planning and implementation of lessons that accommodate for a diversity of learning styles and cultural influences; has problems expressing how to accommodate diverse learners.	Conveys consistent expectations for students, adaptations are part of planning, and attempts to meet individual needs; is aware of cultural influences on approaches to learning and attempts to address these in planning and lesson implementation.	Articulates clearly individual goals for success, actively seeks out resources to the benefit of varied learners, and provides opportunities for students to challenge themselves. Adaptations address cultural and linguistic differences.

RIBTS 6: Teachers create a learning environment that encourages appropriate standards of behavior, positive social interaction, active engagement in learning, and self-motivation.			
Weakness	Developing	Competence	Strength
Student behavior is not monitored, no standards of conduct have been established, or responses to misbehavior are overly repressive or insensitive to individuals.	Standards of appropriate behavior have been communicated but not enforced in a consistent and appropriate manner.	Consistent standards of appropriate behavior are encouraged and misbehavior is addressed in a consistent, prompt, and fair manner.	Standards of conduct create a positive classroom climate, using effective reinforcement and responses are appropriate, respectful and successful.

RIBTS 7: Teachers foster collaborative relationships with colleagues and families to support students' learning.			
Weakness	Developing	Competence	Strength
Makes minimal or no attempt to communicate with parents or colleagues to support students' learning.	Consults with colleagues, but resists incorporating their suggestions.	Consults when necessary with colleagues on matters related to instruction and parents when related to student.	Evidence is presented showing collaboration with colleagues and families to coordinate learning activities or to address other concerns related to teaching.



Feinstein School of Education and Human Development

Student Case Study and Assessment Scoring Rubric

Name:

ID#: 0221659

Teacher Preparation Program: Secondary Education

Major: Technology Education

Assess the extent that the candidate has achieved the following Rhode Island Beginning Teacher Standards in the student case study and assessment. Rate the candidate's performance 1 (an area of weakness) to 4 (an area of strength) for each Standard.

		Weakness (1)	Developing (2)	Competence (3)	Strength (4)
1.	The case study demonstrates that the candidate created instructional opportunities that reflect an understanding of how children learn and develop. <i>(RIBTS 3)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.	The case study demonstrates that the candidate created instructional opportunities that reflect a respect for the diversity of learners and learning styles. <i>(RIBTS 4)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	The case study provides evidence of the candidates' ability to encourage students' development of critical thinking, problem solving, and performance skills. <i>(RIBTS 5)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	The case study demonstrates that the candidate created an appropriate learning environment for students where positive social interaction, active engagement in learning, and self-motivation were evident. <i>(RIBTS 6)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.	The case study demonstrates collaboration with colleagues and/or families to support student learning. <i>(RIBTS 7)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.	Formal and informal assessment strategies were integrated in the case study to evaluate student learning and growth. <i>(RIBTS 9)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7.	The case study provides evidence of the candidate's self-evaluation and responsibility for continued professional growth. <i>(RIBTS 10)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

Evaluator: Farinella

ID#:

Date:

Student Case Study and Assessment Scoring Rubric

Performance Indicators

Weakness	Developing	Competence	Strength
RIBTS 3: Teachers create instructional opportunities that reflect an understanding of how children learn and develop.			
Displays minimal knowledge of developmental characteristics of learners or fails to activate students' prior knowledge.	Designs lessons that demonstrate some awareness of students' prior knowledge and developmental needs; is overly reliant on didactic approaches to learning.	Designs activities that demonstrate an awareness of prerequisite knowledge, learning style and divergent thinking of students.	Learners are stimulated to think and test ideas that include deliberate opportunities to discover the connections between ideas.
RIBTS 4: Teachers create instructional opportunities that reflect a respect for the diversity of learners and an understanding of how students differ in their approaches to learning.			
Date:			
Conveys modest expectations for achievement, fails to seek supplementary materials, or is unaware of individual learning abilities and the impact of cultural background on learning.	Demonstrates occasional success in planning and implementation of lessons that accommodate for a diversity of learning styles and cultural influences; has problems expressing how to accommodate diverse learners.	Conveys consistent expectations for students, adaptations are part of planning, and attempts to meet individual needs; is aware of cultural influences on approaches to learning and attempts to address these in planning and lesson implementation.	Articulates clearly individual goals for success, actively seeks out resources to the benefit of varied learners, and provides opportunities for students to challenge themselves. Adaptations address cultural and linguistic differences.
RIBTS 5: Teachers create instructional opportunities to encourage students' development of critical thinking, problem solving, and performance skills.			
Relies on direct instruction to passive learners utilizing few resources outside of the textbook.	Utilizes a limited repertoire of teaching strategies to engage the learner or resists exploring ways to develop critical thinking.	Uses variety of strategies and multiple resources for delivering materials to engaged learners in solving problems.	Actively involve students in decision making, collaboration, problem solving, and finding resources.
RIBTS 6: Teachers create a learning environment that encourages appropriate standards of behavior, positive social interaction, active engagement in learning, and self-motivation.			
Student behavior is not monitored, no standards of conduct have been established, or responses to misbehavior are overly repressive or insensitive to individuals.	Standards of appropriate behavior have been communicated but not enforced in a consistent and appropriate manner.	Consistent standards of appropriate behavior are encouraged and misbehavior is addressed in a consistent, prompt, and fair manner.	Standards of conduct create a positive classroom climate, using effective reinforcement and responses are appropriate, respectful and successful.
RIBTS 7: Teachers foster collaborative relationships with colleagues and families to support students' learning.			
Makes minimal or no attempt to communicate with parents or colleagues to support students' learning.	Consults with colleagues, but resists incorporating their suggestions.	Consults when necessary with colleagues on matters related to instruction and parents when related to student.	Evidence is presented showing collaboration with colleagues and families to coordinate learning activities or to address other concerns related to teaching.
RIBTS 9: Teachers use a variety of formal and informal assessment strategies to support the continuous development of the learner.			
Uses minimal variety of assessment strategies and/or strategies that are inconsistent with instructional goals and do not provide constructive feedback.	Aware of a variety of assessments, but the information collected is superficially analyzed to adapt instruction and improve student learning.	Designs multiple methods of assessment that are used to collect information to adjust teaching plans and to support student learning.	Learners are involved in self-assessment where feedback is personalized and descriptive to foster continued learning. Multiple methods of teacher assessments enhance student learning.
RIBTS 10: Teachers reflect on their practice and assume responsibility for their own professional development by actively seeking opportunities to learn and grow as professionals.			
Misjudges the success of classroom practice and does not accept constructive criticism well.	Occasionally evaluates classroom practice and makes general suggestions how lessons may be improved.	Generally accurate in determining the success of classroom practice and is open to ideas and suggestions for improvement. Welcomes opportunities for professional growth.	Critically analyzes the strengths and weaknesses of classroom practice and actively seeks constructive criticism. Seeks growth through professional networks and professional reading.

Description of Students:

“Student A”

In January, 2008 at the beginning of the third quarter, when I began my initial observations at North Smithfield High School, I was introduced to a newly arrived student whom I will call “Student A.” “Student A” is a sixteen-year-old boy in the tenth-grade who moved from New Jersey to Rhode Island to live with his aunt and uncle in order to attempt a “new beginning” in school since he was struggling at his New Jersey high school. “Student A” is a quiet, courteous young man who enjoys the school’s extra curricular robotics club and playing video games with his cousin, with whom he lives (who is also in the CADD class). According to his guidance department file, “Student A” has a 504 for a slight hearing impairment which states that he “should sit at or close to the front row of the classroom” in order to better hear instruction. According “Student A’s” guidance report, his cumulative grade point average is 69.375; his class rank is 143/149; he has been absent 15 days and tardy 12 days thus far this year. Knowing this, it was decided that it would be appropriate and helpful to make accommodations for this student in the form of seating, differentiation, and extra help.

As a result of arriving so late in the school year, “Student A” missed the all important introductory portion of the CADD course which includes the essential foundation of AutoCAD LT 2002 operations such as initial start up, page setup, user interface, tool selection, icons, menus, and how to save work. In order to help accommodate “Student A,” lessons were modified in order to set an individual pace for him while the rest of the

class continued to proceed with the more advanced lessons they were working on when he arrived. Specifically, during my initial observation period, “Student A” received one-on-one help from me while the cooperating teacher taught the rest of the class. We started at the very beginning of the course in order to learn the essential foundations of AutoCAD LT 2002 by working on drawings that the rest of the class had already completed. “Student A” welcomed this extra help, and was not afraid to ask questions.

Like many students his age, “Student A” is comfortable with computers and the Windows Operating System environment, however he struggles with mathematical concepts such as fractions and geometric concepts such as degrees and angles. After becoming familiar with the AutoCAD work environment, we reviewed these basic mathematical concepts in order to help draw the assigned geometric shapes often used in AutoCAD.

Student “B”

In addition to meeting “Student A” at the beginning of the third quarter, I was also introduced to another student whom I will call “Student B.” “Student B” is a seventeen-year-old boy in the eleventh-grade who is a native of North Smithfield, Rhode Island and lives with his single mother. “Student B” is an outgoing, gregarious, courteous young man who plays guitar and drums, and enjoys playing in a band with friends. According to his guidance department file, “Student B” does not have an IEP; his cumulative grade point average is 87.590; his class rank is 38/147; he has not been tardy; and he has seven absences. Upon discovery of this information, I was not surprised at how rapidly “Student B” had been progressing with his assigned drawings in class. “Student B” is an independent learner who enjoys a challenge. Because he progressed so rapidly, it would

also be appropriate and helpful to make accommodations for “Student B” as well in the form of differentiation and extra assignments in order to hold his interest and continue to challenge him.

He is extremely comfortable with computers and the Windows Operating System environment and he excels with mathematical concepts such as fractions and geometry as he is taking Pre-Calculus and Honors Physics. After becoming familiar with the AutoCAD work environment, “Student B” quickly applied himself and consistently finished his assignments before his classmates. Frequently he would help his neighbors with any questions that they had regarding the program. Oftentimes, I would assign extra drawing assignments to “Student B” so that he would have something important and meaningful to do (not simply “busy work”) once he completed his assigned drawings. Being a more advanced and very eager learner, “Student B” welcomed the extra assignments, and was not afraid of new challenges. “Student B” would be assigned drawings derived from subsequent lessons as well, and this was very helpful in allowing him to assist me at the master workstation keying in information as I demonstrated new lessons and concepts on the Smart Board.

Overview of Instructional Goals for a Four Week Period

The instructional goals for the period from March 6 to April 3 include lessons and drawing assignments for Orthographic Views, Isometric Views, and Sectional Views. The following are the key concepts and objectives of the instructional goals for each lesson:

Orthographic and Orthographic Sectional Views

Select, align, and draw FRONT, TOP, and SIDE VIEWS of an object provided

Correctly identify, align, and draw properly oriented and *sectioned* 3-View Orthographic drawings and PLOT when completed

Cutting plane lines in the orthographic view, section letters, and proper hatching

Isometric and Isometric Sectional Views

Isometric views are 2-D drawings which appear to be 3-D, all lines are vertical or 30-degrees off horizontal, Isoplane F5 snap settings for left, right, and top views are used.

Learning to draw in the Isometric environment; how to dimension objects using the oblique technique; and drawing true circles as isometric ellipses.

Cutting plane lines, section letters, and proper hatching of isometric objects.

Correctly identify, align, and draw properly oriented and *sectioned* isometric drawings and PLOT when completed.

In order to accommodate both “Student A” and “Student B,” some modifications were made to the instructional goals. Each student had the opportunity to redraw and resubmit corrected drawings at least once in order to learn from their mistakes and attempt to earn a higher grade. “Student A,” was allowed to redraw and resubmit three times. In addition, he was provided with as much one-to-one help that I could provide during class. I also sent home a progress report and deficiency to his guardians as school policy requires that all students with a 70 or below average receive one. His guardians signed the deficiency and wrote a note encouraging extra, after-school help. I stayed after school with him several times in order to help him with any particularly troublesome areas. “Student A” had most difficulty with some of the isometric sectional view assignments, and he certainly benefited from his extra efforts and the extra help he received, as reflected in the improvement he made in his drawing assignments. “Student B” also received differentiation and modifications, but they were in the form of extra,

more advanced assignments that counted as extra credit toward his grade. “Student B” enjoyed the challenge of the extra assignments and was actually able to help his classmates with the new concepts when they “caught up” with him.

The following is a Portfolio of Student work comprised of drawings completed by “Student A” and “Student B.” The name of each student has been intentionally blacked out in the title block and from any comments on each drawing in order to ensure anonymity and privacy. The drawings are scans of photocopies of the original drawings complete with corrections, comments, and grades. The original drawings were corrected with colored pens so that the corrections could be easily distinguished from the CADD drawing. Unfortunately these scanned copies are black and white.

Portfolio of Student Work

The following is a list of work completed by “Student A” and “Student B” in March, 2008:

“Student A” Work Examples – Fifteen Completed Drawings saved as PDF files

[Bookend Orthographic View](#)

[Bookend Isometric View](#)

[Bookend Orthographic Sectional View](#)

[Bookend Isometric Sectional View](#)

[Bracket Orthographic View](#)

[Bracket Isometric View](#)

[Bracket Isometric Sectional View](#)

[Bracket Orthographic Sectional View](#)

[Cutter Holder Orthographic View](#)

[Cutter Holder Isometric View](#)

[Cutter Holder Orthographic Sectional View](#)

[Cutter Holder Isometric Sectional View](#)

[Vertical Bracket Orthographic View](#)

[Vertical Bracket Isometric View](#)

[Vertical Bracket Isometric Sectional View](#)

“Student B” Work Examples – Twenty-Seven Completed Drawings saved as PDF

files

[Bookend Orthographic View](#)

[Bookend Isometric View](#)

[Bookend Orthographic Sectional View](#)

[Bookend Isometric Sectional View](#)

[Bracket Orthographic View](#)

[Bracket Isometric View](#)

[Bracket Orthographic Sectional View](#)

[Bracket Isometric Sectional View](#)

[Clamp Plate Orthographic View](#)

[Clamp Plate Isometric View](#)

[Clamp Plate Orthographic Sectional View](#)

[Clamp Plate Isometric Sectional View](#)

[Cutter Holder Orthographic View](#)

[Cutter Holder Isometric View](#)

[Cutter Holder Orthographic Sectional View](#)

[Cutter Holder Isometric Sectional View](#)

[Exploded Box](#)

[Exploded Bracket](#)

[Fixture Base Orthographic View](#)

[Fixture Base Isometric View](#)

[Fixture Base Orthographic Sectional View](#)

[Fixture Base Isometric Sectional View](#)

[Vertical Bracket Orthographic View](#)

[Vertical Bracket Isometric View](#)

[Vertical Bracket Orthographic Sectional View](#)

[Vertical Bracket Isometric Sectional View](#)

Assessment:

Both students were assessed in several ways. Initially, a formative assessment of each student's prior knowledge and possible misconceptions of mathematical, geometric, and drafting concepts was made by way of introductory question and answer sessions. It first had to be determined if students: were able operate a Windows Platform computer; to properly dimension objects; perform fractional mathematic calculations; were familiar with Standard and Metric forms of measurement; understood shape and angle terminology; and possess a rudimentary understanding of basic mechanical drawing concepts.

Subsequently, students are then formatively assessed by submitting both softcopy and hardcopy versions of completed drawings which count as class work assignments. The hardcopy drawings are archived in their individual three-ring binders for submission to their Performance Based Graduation Requirement Portfolio (PBGR Portfolio) and are included as PDF files as mentioned in the previous Overview Section of this document. These drawings must be accurate two-dimensional and quasi-three-dimensional technical drawings plotted on the correct ANSI-size sheet of paper. The softcopy drawings are checked for flaws and accuracy that may not be readily perceptible on the hardcopy, and then receive a grade. For each mistake five points is deducted. The students have the opportunity to redraw and resubmit each corrected drawing at least twice and receive five points less than his high score the first redrawn submission, and ten points less for the second submission. In the case of “Student A,” he may submit the drawing three times, and he is able to receive his highest score with no deductions. As previously mentioned, any extra drawings completed by “Student B” earn him extra credit toward his final grade.

Students are also assessed for class participation so taking part in class discussions counts toward class participation. Students have the opportunity to volunteer to input data into teacher’s master workstation during Teacher Smart Board CADD demonstrations, and to also help their neighbors. Students, such as “Student A,” who ask for extra help during class or stay after school for help earn credit toward participation because they are viewed as making extra effort as a form of participation. Class attendance is considered an important part of class participation as this is when students are actually completing practice drawing assignments during class time.

Finally, students are assessed by way of quizzes administered in class. [Quizzes](#) and [exams](#) are both paper-based and computer-based. The traditional paper-based quizzes help assess students' general knowledge and comprehension of the AutoCAD LT program's workings. The computer-based quizzes are designed to assess students' performance using AutoCAD LT by measuring students' abilities to apply, analyze, synthesize, and evaluate how to use the various tools and techniques of actually creating accurate technical drawings within a specified, finite time limit of a quiz. Since not all students are good "test takers" (for example "Student A" has difficulty with tests), the evaluation process places more emphasis on completed classroom drawings than on tests. Because there are many more assigned classroom drawings than tests, students have a better opportunity to not only practice their skills, but also achieve a better grade by learning from mistakes and having the opportunity to correct those mistakes.

Commentary:

While student teaching at North Smithfield High School, much experience and information was gained, and a great deal was learned about the teaching and learning processes. Working with an excellent cooperating teacher, staff, and the students in this

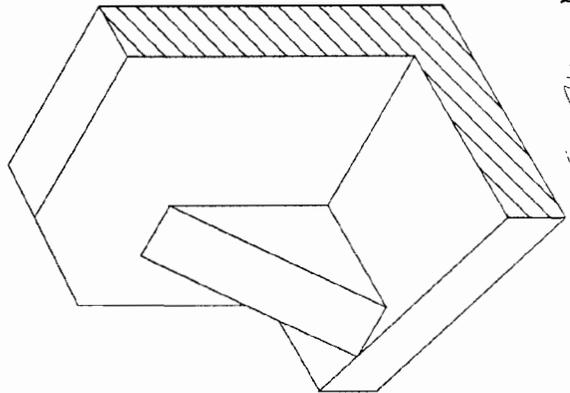
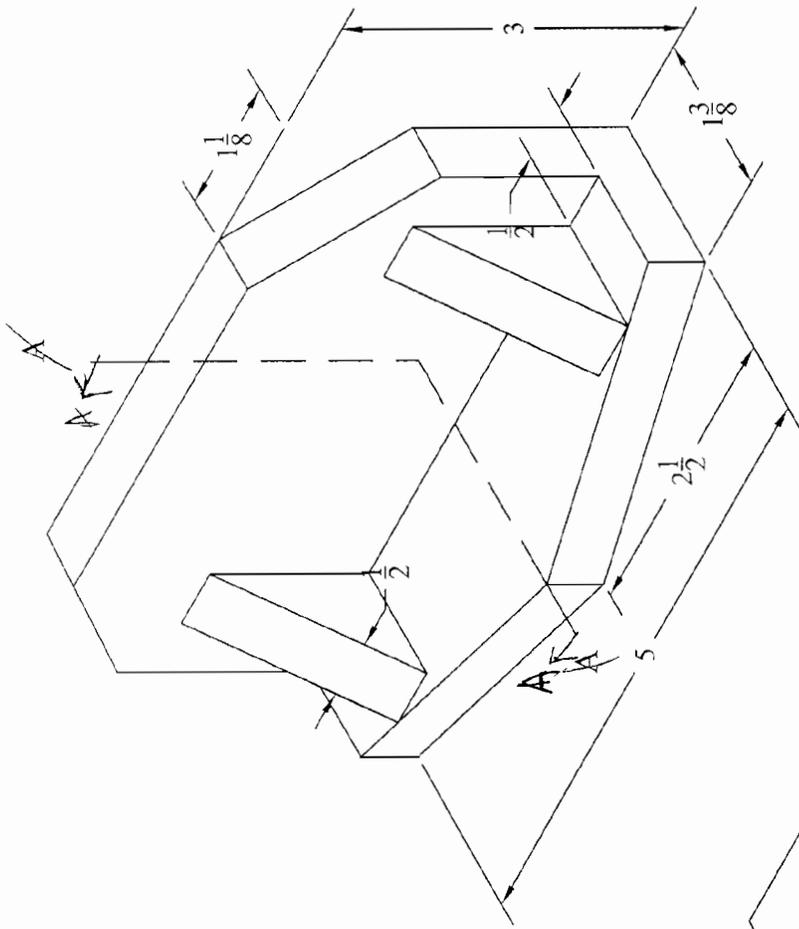
CADD class, particularly “Student A” and “Student B,” I learned a great deal about differentiation, which is what inspired me offer extra help to “Student A,” assign extra drawings to “Student B,” and develop the PowerPoint Presentations as a form of “scaffolding” for “visual learners,” and also to accommodate learners with different levels of readiness. It was gratifying to observe several students, who had previously sought a great deal of individual help (particularly “Student A”), download the PowerPoint Presentations from the student resource folder to their flash drives (or network folders) so that they could use them for future reference. The PowerPoint Presentations helped “Student A” and others grasp key concepts that they needed to know, and allowed me to move about the room in order to offer individual help in other areas. “Student A” appears to be a very “concrete” visual learner, whereas “Student B” is at a level of readiness wherein he is able to think more in the abstract domain. “Student B” progressed far enough ahead of the rest of the class where he was able to begin the introduction to a three-dimension modeling program known as Solid Works (which will not be introduced until the third week of the fourth quarter).

Reflecting upon my experiences in the classroom with students, I was able to re-adjust and improve upon both the implemented and subsequent lessons by employing the previously mentioned differentiation techniques. It was interesting to note how students responded to different methods of lesson delivery and individual help, especially “Student A” and “Student B.” While some of the lessons I taught used no technology assistance such as PowerPoint, for the lessons that did use technology, it was extremely beneficial – especially the Smart Board. After reflecting upon the technologically assisted lessons, it occurred to me that an “audio-visual” presentation might help to

convey some of the lengthy step-by-step procedures more easily. Here was the PAR model (**P**lan, **A**ct, **R**eflect) being used to good effect. I *planned* the lessons, *acted* upon (implemented) the lessons, and subsequently *reflected* upon each lesson in order to improve upon not only the lesson but also my own approach and performance. I found certain areas to which I needed to pay more attention – especially in regards to classroom management. Certainly the students in this class are very respectful and well-behaved, however as I mentioned earlier I did find that I needed to move around the room quite a bit in order to observe them to ensure that they were on task and not “surfing the web” or using their workstations for anything other than the tasks at hand. This is something important that I discovered and needed to make accommodations for after teaching the first two lessons in order to help effectively guide future lessons (please see the next section, “Classroom Management Plan,” for more information).

1
CADD
3/6/08
Book End

85



SECTION A-A

~~SECRET~~

Scale: 0.375954

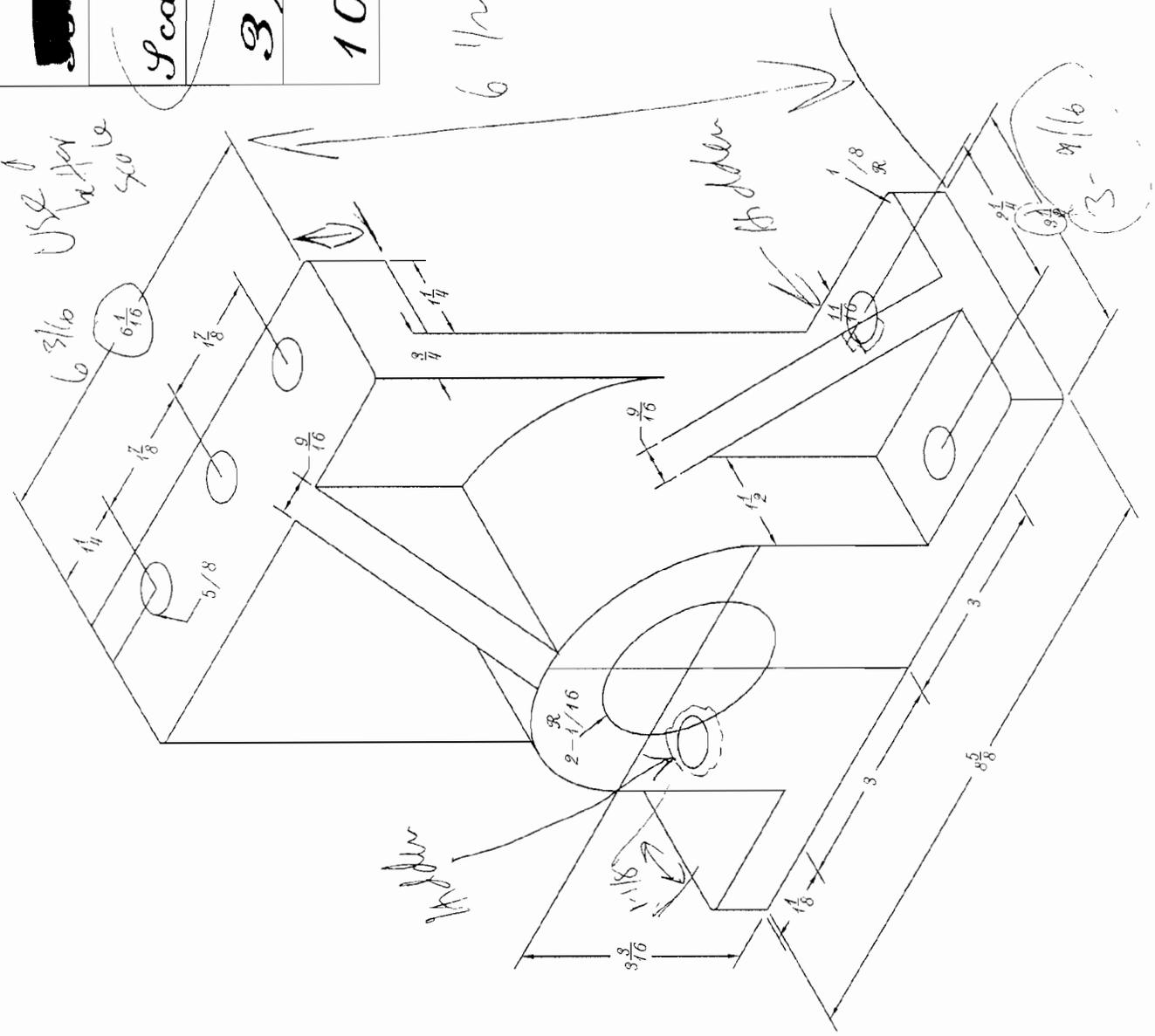
3/25/08

10-56 Bracket

6 1/2" Steel JWB
~~SECRET~~

90

Use
water
40



[Redacted]

8 Book End

Cadd 1

3/12/08

Scale 1:2

100

