



Student teacher	Lilliana Stojanoski	Date	19.10.16
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Session	Planning for Learning					
P1	Learning Area/Year Level	Design Technology – Furnishing Studies Year 12 – class 12 2A		Curricular Intentions (Content descriptors)	Industry practices are used to effectively and efficiently manage manufacturing enterprises, workplace health and safety, employee personal and interpersonal skills and customer expectations to safely change raw materials into products wanted by society and which add value for both enterprises and consumers. Qld Senior Syllabus – Furnishing Skills	
	Enduring Understandings (including Values Understandings)		Students will understand and appreciate the industry practices and production processes used in the creation of quality products for the furnishing industry.			
	Learning Goals (Know, Do, Value)	Students will: (i) Learn about furnishing industry production practice and processes. (ii) Students will individually manufacture a chessboard with a drawer using quick assembly fittings. (iii) Value the processes of production when creating quality products for furnishing industry.				
	Phase & Timing	LG (code)	Essential Questions	Learning Experiences including Teaching Strategies	Differentiation/ Assessment Strategies	Resources & Organisation for Learning
	ENGAGE (APPROX. 10-15 MIN)			Students quietly lined up outside the classroom, check uniform and if worn correctly – invited to come in. Mark the roll. Students explained the lesson activities and the goal for today. Students handed out their workbooks and textbooks; those who did not submit need to bring the workbooks to class.		
	EXPLORE (APPROX. 50-55 MIN)	(i) (ii) (iii)	What role does production process play in creating components and assembling products in a quality and safe manner? What is product manufacture?	The teacher to work with the students on the workbook questions – whole class activity. <u>Numeracy section must be completed first during this lesson</u> ; other sections will be worked on after (time permitting). Set the rest for homework and remind the students the workbooks are due on Friday .	Whole Class Differentiation: 1. Students who are behind with work will be paired with a higher achieving peer; 2. Work together as a whole class 3. individual help by the teacher, 4. Teacher to help by working out on the whiteboard.	Workbooks, textbooks, pencils, whiteboard, markers, teacher handbook.
	REVIEW & CONCLUDE			Opportunity for questions/comments. Students to pack up.		

Session	Planning for Learning					
	(APPROX. 5 MIN)					
P2	Learning Area/Year Level	Design Technology – 3D design and print Year 7		Curricular Intentions (Content descriptors)	Analyse ways to produce designed solutions through selecting and combining characteristics and properties of materials, systems, components, tools and equipment (ACTDEK034)	
	Enduring Understandings (including Christian or Values Understandings)		Students will understand how the features of technologies such as 3D modelling and printing influence design and production decisions.			
	Learning Goals (Know, Do, Value)	Students will: (i) Learn the principles of 3D design and printing using Autodesk Inventor and a 3D printer. (ii) Develop their own designs using the Autodesk Inventor and print them using a 3D printer. (iii) Appreciate the 3D features of technologies and an impact they have on design and production decisions.				
	Phase & Timing	LG (code)	Essential Questions	Learning Experiences including Teaching Strategies	Differentiation/ Assessment Strategies	Resources & Organisation for Learning
	ENGAGE 10 MIN			Students quietly lined up outside the classroom, check uniform and if worn correctly – invited to come in. Mark the roll. <i>Seating plan.</i> As these lessons are in the computer lab, check all have keyboard and mouse. Students to log in, own lap tops or desktops; open worksheet document.		Computers, laptops, teachers computer, projector
	EXPLORE APPROX. 25 MIN APPROX. 30 MIN	(i) (ii) (iii)	What is 3D modelling? What is 3D printing? What are the benefits of 3D design and 3D printing? How has 3D printing changed design and production in general? What are some specific examples? Is it a change ‘for the better’?	Students to go through all the questions for task one with the teacher, print or e-mail to teacher and submit. Task 2 questions done during future lessons. <u>While the class is logging in, teacher will give extension work to high achieving students: image download and trace, extrude or investigate models for the next task: phone holder.</u>  Students to close the task sheet document and open Inventor. Open their project. Explain this <u>is</u> the project, the key tag (some confusion last time), explain the <u>issue with the letters size: height and depth, its 3D!</u>  Explain the hole tool, inform about the help button and the command bar. Show students how to trace over images to produce other shapes. Students must watch first, then work – remind to ‘ <u>dip your lid</u> ’. Next lesson – print time!	Differentiation: 1. Students who are behind with work will be paired with a higher achieving peer; 2. Teacher to demonstrate simultaneously as students work 3. individual help by the teacher, 4. Extension work for two high ach. students	Computers, laptops, teachers computer, projector, task sheet, Inventor, internet connection.
	REVIEW & CONCLUDE 10 MIN			Opportunity for questions/comments. Students to save work, pack up, leave the comp. lab as they found it.		

Session		Planning for Learning						
P	Learning Area/Year Level				Curricular Intentions (Content descriptors)			
	Enduring Understandings (including Christian or Values Understandings)			PERIODS THREE AND FOUR TODAY ARE SPARE LESSONS				
	Learning Goals (Know, Do, Value)		Students will: (iv)					
	Phase & Timing	LG (code)	Essential Questions	Learning Experiences including Teaching Strategies		Differentiation/ Assessment Strategies		Resources & Organisation for Learning
	ENGAGE 5 MIN							
	EXPLORE 55 MIN							
	REVIEW & CONCLUDE 5 MIN							
P	Learning Area/Year Level				Curricular Intentions (Content descriptors)			
	Enduring Understandings (including Christian or Values Understandings)							
	Learning Goals (Know, Do, Value)		Students will: (i)					
	Phase & Timing	LG (code)	Essential Questions	Learning Experiences including Teaching Strategies		Differentiation/ Assessment Strategies		Resources & Organisation for Learning
	ENGAGE 10 MIN							
	EXPLORE 55 MIN							
	REVIEW & CONCLUDE 5 MIN							

Critical reflection about...		
Planning	Implementation	Student Learning
<ul style="list-style-type: none"> YEAR 12 CLASS WILL WORK ON THEIR WORKBOOKS. MOST STUDENTS HAVEN'T MADE MUCH PROGRESS AND THEY HAVE A LOT TO CATCH UP ON. WORKBOOKS WERE HANDED OUT TWO WEEKS BEFORE THE BREAK AND IF NOT COMPLETED DURING THE LESSON STUDENTS WILL HAVE TO MANAGE IN THEIR OWN TIME. YEAR 7 STUDENTS MOSTLY NEED TO WORK ON THEIR PROJECT AND THE TASK SHEET. NEXT LESSON THEY WILL 3D PRINT AND THE NEXT PROJECT WILL BE INTRODUCED. THE TWO HIGH ACHIEVING STUDENTS WILL BE EXTENDED BY GIVING THEM NOT JUST ADDITIONAL WORK BUT MORE ENGAGING, WORK INVOLVING HIGH CREATIVE AND PROBLEM SOLVING THINKING. UNDER ACHIEVING STUDENTS WILL BE PAIRED WITH A PEER AND HELPED BY THE TEACHER. TWO BOYS AND A GROUP OF 3 GIRLS WERE TALKING AND QUITE DISRUPTIVE DURING THE LAST LESSON. SEATING PLAN TO BE CREATED AND WILL REMAIN LIKE THIS UNTIL THE END OF THE TERM. 	<ul style="list-style-type: none"> I STARTED WORKING WITH Yr 12 CLASS ON THEIR WORKBOOKS AS A CLASS GROUP WORK, AS THEIR CLASS TEACHER SUGGESTED. HOWEVER, HALF WAY THROUGH THE LESSON I REALISED THAT SOME WERE WORKING THROUGH ON THEIR OWN AND DOING QUITE WELL, SOME WERE QUITE DISENGAGED WHILE OTHERS COULD NOT KEEP UP EVEN THOUGH WE WERE MOVING THROUGH THE QUESTIONS REASONABLY SLOWLY. I STOPPED, TOLD THEM WHAT I HAD OBSERVED AND GROUPED THEM BASED ON: WORK ON MY OWN, WORK TOGETHER, WORK WITH THE TEACHER. THIS WORKED MUCH BETTER AND STUDENTS COMPLETED NEARLY THE WHOLE SECTION. Yr 7 DESIGN CLASS WORKED MUCH BETTER THIS WEEK. I HAVE RECORDED WHAT THEY STRUGGLED WITH DURING THE PREVIOUS LESSON AND ADDRESSED THOSE CONCERNS FIRST. ONCE ALL WERE COMFORTABLE WITH THE PROGRAM TOOLS AND HOW TO USE THEM WE MOVED ONTO THE NEXT TOPIC. EVERYONE HAS FINISHED THEIR PROJECT. 	<ul style="list-style-type: none"> Evident in their 3D Inventor work, task sheet, copy of task sheet created by the case study student.

Supervising teacher's evaluative feedback

*Now What?
<p>I am glad I was flexible with the Yr 12 class and will continue to do so. They responded much better to working with peers with the teacher's guidance.</p> <p>Yr 7 class will have their projects 3D printed and we will move onto the next task introducing more program tools. I might record a video again of instructions as a teaching tool students can use in own time. This worked quite well last time.</p>

*(Based on Rolfe et al's Reflective Model, 2001)