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| EduTextIDbwjpg | | | **EDC3100 Lesson Planning Template** | | | | | |
| **Year Level/s:** Prep/1/2 – Special needs **Date:** 22.10.2015 **LESSON 5  Learning area (subject):** Mathematics  **Duration:** 1 hour | | | | | | | | |
| What is the learning experience / broad issue / concept / focus of the learning from the unit that this lesson relates to? | | | | | | | | |
| ***Mathematics - Foundation Year - Measurement and Geometry - Shape - ACMMG009***  ***Content Description:*** *Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment*  ***Elaboration:*** *sorting and describing squares, circles, triangles, rectangles, spheres and cubes*  ***Mathematics - Year 1 - Measurement and Geometry - Shape - ACMMG022***  ***Content Description:*** *Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features*  ***Elaboration:*** *focusing on geometric features and describing shapes and objects using everyday words such as 'corners', 'edges' and 'faces'*  The broad concept of this lesson is 2-dimensional shapes: recognition & naming of various 2-dimensional shapes, and describing their features.   * Triangles, circles, ovals, squares & rectangles * Pentagons, hexagons & octagons | | | | | | | | |
| Lesson **Objective**: What specific part of Learning Experience does **this** lesson aim to develop? A good objective must indicate “Given what, Do what, How well?” | | | | | | | | |
| General review of two dimensional shapes, before moving on to three-dimensional shapes. | | | | | | | | |
| **Know and Do:** By the end of the lesson what knowledge (content and understandings) and skills (processes) do students need to develop? | | | | | | | | |
| Students need to **know** ...   * Names of 2D shapes * Features of 2D shapes | | | | | Students need to **be able to** ...   * Name & identify 2D shapes correctly * Demonstrate recognition of shapes in everyday objects | | | |
| **Evaluation/Monitoring and Assessment:** | | | | | | | | |
| **Prior Knowledge: *(How will I find out what the students know and/or remember?)*:**  Review of prior learning, recognition of shape names and pictures, counting the number of sides of each shape. | | **Formative Assessment: *(How will I monitor student understanding along the way?):***   * Checking for correct identification of shapes in verbal question & answer. * Checking for correct identification of shapes in verbal question & answer. * Correct identification of shapes. | | | | **Summative Assessment:** ***(How will I provide concrete evidence of student learning?):***  Completion of ‘Robot bingo’ worksheet activities, with correct identification of shapes. | | |
| **Resources needed:** | Smart Board, whiteboard, whiteboard markers, laptop, internet access for online activities, worksheets, cardboard 6-sided dice,  Carpet shapes. | | | | | | | |
| **Teaching Strategies and Learning Steps What to say Organisation/Resources Individualising learning** | | | | | | | | |
| **Introduction: Key learnings and how they will be achieved *(Consider strategies, relevance, individual/group work, clarify student understandings of task, etc.)***  ***WALT – We are learning to identify squares, as one of our 2D shapes.***  ***WILF – Correct identification of 4-equally-sided shapes as squares. Also looking for careful watching & listening, and polite taking of turns.***  ***TIB – Squares are important shapes that we use a lot, and we sometimes get them confused with other shapes such as rectangles.*** | | | | | | | | |
| **Time Allocation:** 10 minutes | | | | **Teachers will:** | | | | |
| **Students will:**  ***ICT activity:***  Participate in calming activity (for after swimming): Go Noodle - Maximo <https://www.gonoodle.com/channels/maximo>  ***Alternative manual activity:*** Review 2D shapes – names, no. of sides, no. of angles :  Verbal Q&A prompted with concrete objects –   shape blocks in a bag – students to pull out one each, and   identify them to the rest of the class.  Review some of the useful and well-known objects represented by shapes from previous lesson.  Assist teacher to make a list of these objects on the whiteboard. | | | | *What key messages will I convey?*   * The correct way to identify squares   *What strategies will I use to do this?*  Verbal question & answer –  “How many sides does this block have?”  “Which shape has 3 sides?” etc.  Repeat the definition of ‘polygons’ and use the polygon sheet.  Review as many as possible of the useful and well-known objects viewed in previous lessons. | | | *What resources do I need?*  Go Noodle - Maximo <https://www.gonoodle.com/channels/maximo>  Cloth bag with shape blocks inside  Laptop with internet access  Interactive whiteboard.  Whiteboard and markers.  Teacher Aides, support staff. | *How can I make adjustments to meet individual student needs?*   * Rest breaks with movement or exercise activities to refocus attention. * A3 worksheets for Angus, Cody & Noah * Teacher Aides to assist these students 1-on-1, and other students as needed. * Signed & visual elements for Noah; physical assistance for Angus & Cody. * Audio and visual elements to reinforce learning, and focus attention of visual learners. |
| **Lesson Body: - step by step outline of learning experience sequence *(Consider HOTS tasks, monitoring understandings, provision and use of resources, general student responsibilities etc.)*** | | | | | | | | |
| **Time Allocation:** 40 mins | | | | **Teachers will:** | | | | |
| **Students will :**  Participate in workstation rotations, 10 mins each;  all based on 2D-shape content from previous lessons.   1. **[ICT, visual, logical]** Participate in online activity: Shape lab – interactive resource, online game <http://www.bbc.co.uk/bitesize/ks1/maths/shapes/play/popup.shtml> With teacher/aide assistance, students will take turns to choose correct shapes in game to create robotic creatures. 2. **[Fine-motor, kinesthetic]** Playdough fine motor activity: with playdough and popsicle sticks, students get to be the Shapeshifter, and create a triangle followed by increasingly complex shapes as seen in the story, The Greedy Triangle. 3. **[Verbal linguistic, kinesthetic]** Robot bingo: using a 6-sided large die (of soft foam) and a Robot worksheet, students will roll the die, call out the shape rolled, and then name and colour the chosen shape on their robot worksheet. 4. **[Bodily kinesthetic]** **(optional, depending on staff available to monitor activity)** With large carpet shaped tiles spread out on the floor (inside or outside) students can play either ‘Simon Says’, or ‘What’s the Time Mr Wolf?’, adapted to the 2D-shapes, which the students will step on. | | | | *What strategies will I use to facilitate, guide and enable students to achieve the learning?*  Introduce the lesson as being something different, and demonstrate each of the workstations, will clear instructions on how to perform each activity.  Specify the amount for each group to spend on each activity, and which students will be in each group.  (12 students? = 3 per group,  10-15 mins per workstation?)  Encouraging shared participation of students, with taking turns to perform activities.  Students may need prompting and assistance, or reminders to what each shape is.  Watch students for non-engagement, fidgeting, talking during transitions. Correct as necessary.  Use Terrific Tickets as rewards for positive behavior, turn-taking, etc, watch C to reward; adjacent reinforcement for negative behavior; X’s on whiteboard as warnings for J. | | | *What resources do I need?*  Shape lab – interactive resource, online game <http://www.bbc.co.uk/bitesize/ks1/maths/shapes/play/popup.shtml>  Laptop with internet access.  Interactive whiteboard.  Whiteboard and markers.  Teacher Aides!  Worksheets: Shape Rolling Robot: 9 x A4, 3 xA3.  6-sided large dice.  Carpet shapes.  Playdough, popsicle sticks. | *How will I know if students are achieving the learning objective/s?*  Check for correct identification of shape name, and matching details to pictures on games and worksheet.  Also check for understanding and personal connection to everyday objects as representing 2D shapes.  Participation in ‘Shape Lab’ to be documented and collected as evidence of learning.  Completed ‘Robot Bingo’ worksheet to be collected as evidence of learning.  Teacher to scribe names of shapes for students if needed. |
| **Conclusion:** R**eviewing learning/Summarising/Articulating where to next *(Strategies to capture learning that occurred and move thinking forward.)*** | | | | | | | | |
| **Time Allocation:** 10 minutes | | | | **Teachers will:** | | | | |
| **Students will:**  Watch & listen to Youtube music clip or story –   * "Squares," Songs About Shapes by StoryBots: <https://www.youtube.com/watch?v=jOr2eRBluUs> * “The Greedy Triangle” <https://www.youtube.com/watch?v=kPuI4XyyZUE>   Freestyle play with playdough. | | | | *How will I help students to synthesise learnings?*  Checking for (and assisting with) correct identification of 2D shapes, both on the dice and their worksheets.  Non-competitive activity – all students should hopefully finish together, and have fun. | | | *What plans are in place for those who finish early?*  Youtube warm-down video, either Storybots – Squares, or The Greedy Triangle.  Freestyle play with playdough, creating shapes of choice. | *What about those who need more time?*  Teacher aides and teacher can assist with one-on-one to finish task. |

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| **Reflection and Adjustments**  **Prac Course: EDC3100 Week: 3 Lesson No: Unit/ Topic Area:** | |
| **Did students learn what they were supposed to?** | **How could this lesson be improved for next time?** |
| **(Self-evaluation of learning experience outcomes)**  Yes – students participated & engaged well, understood & enjoyed the activities, especially being mostly physical activities.  They translated the lesson content into the activities well, recognizing & naming shapes, & relating to real-world use.  Change of routine was accepted well, especially with tired students after swimming lesson. | **(If I was to teach this lesson again what would I change and why?)**  Prepare room/workstations earlier.  Include teacher aides in planning more.  Plan teams of students better ahead, to minimise emotional outbursts  or conflicts.  Monitor groups more closely, or have more staff in each. |
| **What’s next?** | **How were authoritative pedagogies supported?** |
| **(Points to inform subsequent lesson)**  Use physical/tactile activities where possible to engage this group. | **(e.g. Productive Pedagogies, Bloom’s Taxonomies, Habits of Mind)**  Bloom’s Taxonomy – LOTS: understand, remember, apply  Explicit teaching – I do – modelled   * We do – with teacher aides * You do – extra turns   Multiple Intelligences – physical, visual, mathematical/logical. |

**Suggestions/Comments from others:**

**References to remember:**

What are 2D and 3D shapes? – Interactive online activity (covers the meaning of the 3 dimensions quite well too, great bridging resource)

<http://www.bgfl.org/bgfl/custom/resources_ftp/client_ftp/ks2/maths/3d/index.htm>

<http://resources.woodlands-junior.kent.sch.uk/maths/shape.htm#Shapes>

"Squares," Songs About Shapes by StoryBots:

<https://www.youtube.com/watch?v=jOr2eRBluUs>

Shape lab – interactive resource, online game (but too hard maybe? – lines of symmetry, fractions, etc)

<http://www.bbc.co.uk/bitesize/ks1/maths/shapes/play/popup.shtml>

<http://resources.woodlands-junior.kent.sch.uk/maths/shape.htm#Shapes>

Robot colouring sheet + shape dice – game to only colour in the called out shapes, each child take turns to help roll the dice and call out the shape. (An easy version of bingo, without the competitive edge.)

**Lesson/session feedback from mentor teacher**

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| **Pre-service Teacher: Suzanne Usher** | **Date: 22.10.2015** |
| **School:** | **Subject: Maths - rotations** |
| **Mentor teacher: B. A. C.** | **Class Observed:  SEU – Prep/1** |

**Teaching Context**: general description covering number of students, their attentiveness, and physical environment

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| **Style of lesson** |  expository   group work |  inquiry   laboratory |  supervised study   prac outdoor   other |
| **Special Features of the Lesson** | *Rotations focused around shapes at P/1 level.* | | |

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| **Dimension** | **Descriptors** | **Comments** |
| **Subject Knowledge**  RUA Ad G VG | 1. demonstrates knowledge and understanding of the subject matter 2. understands key concepts |  |
| **Preparation**  RUA Ad G VG  **NB:**  RUA = requires urgent attention  Ad = adequate  G = Good  VG = Very Good | 1. effective preparation 2. objectives clearly articulated 3. ability to design effective learning sequences 4. imagination and variety of approaches and use of resources 5. other | *Needed to set up system before the lesson started.*  *Forward planning.* |
| **Interaction**  RUA Ad G VG | 1. able to develop rapport with students 2. shows confidence in front of a class |  |
| **Communication**  RUA Ad G VG | 1. uses effective communication skills in classroom 2. effective use of own physical resources (especially voice and gesture) 3. clarity of instructions, questions, and explanations 4. able to offer sound advice and guide effective learning |  |
| **Presentation**  RUA Ad G VG | 1. appropriate teaching strategies 2. appropriate introductory and closure techniques 3. effective use of explanation, questioning, reinforcement 4. satisfactory pacing of lesson 5. able to engage students in the learning process |  |
| **Classroom Management- Organising students for learning**  RUA Ad G VG | 1. maintains awareness and control over the whole group 2. effective use of a variety of materials 3. able to modify planned events as need for more effective teaching 4. clarity of directions and guidelines 5. monitor and supervise 6. able to design environment and activity to engage student learning 7. other |  |
| **General Comments**:  *Principle of lesson was good, good choice of rotations.*  *Just needed more time to setup before lesson started.*  *Need to monitor the other groups, keep an eye on what’s happening – if it looks like it’s going south, then change.* | | |