**Learning Centres Assignment**

**Math 412**

* You will be randomly assigned to a group of five and each group will be randomly assigned a grade from P to 6.
* Your group will choose a unit from your assigned grade level for which to develop the learning centres. It is preferred that you choose an aspect of Numeracy (Number & Operation), Patterns and Algebra, or Geometry. Your centres should focus on the key concepts from the unit.
* Each group member is responsible for developing two learning centres however you should plan together so that there is good cohesion and variety among the centres. You will also work on a two-page write-up collaboratively.
* The two-page write-up should include
	+ the Atlantic Canada Curriculum outcomes addressed by the centres
	+ a summary of each centre
	+ a detailed explanation as to which outcomes and processes are being assessed by each centre and how they should be assessed.
* Your centres should draw upon what you have learned in your P&P and inclusion classes, as well as in this class to ensure there is a significant level of differentiation in each of the centres. In particular you should incorporate differentiation through a variety of:
	+ learning modalities
	+ learning styles
	+ multiple representations
	+ levels of difficulty
* You will be given time in class to set up your learning centres and allow your classmates to engage with the activities and ask questions. The presentations will occur on the following dates:
	+ February 23, 2010 – P, 1, 2 & 3
	+ February 25, 2010 – 4, 5 & 6
* Some key points to remember:
	+ Learning centres are meant to be student-led not teacher led. The centre directions should be clear enough that students can easily engage with the tasks without help from teacher.
	+ Attend to the reading level for the grade level. Remember most grade primary and 1 students in particular cannot read written directions.
	+ It is often a good idea to include variety in a centre so that the student can return to the centre and engage with a different but similar task.
	+ Manipulatives are available to be borrowed from the CRC although please be mindful to share.
	+ Activities should be focused on good mathematics, rich and meaningful tasks, and should be fun and engaging for students.
	+ You should cite any sources you make use of.

**Scoring Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **4** | **3** | **2** | **1** |
| **Your centre’s appeal** | the centre is presentedsuch that the task andthe materials wouldexcite students at thegiven level | the centre is presentedsuch that the task andthe materials wouldengage students at the given level | the appeal of thecentre’s task isquestionable | the centre’s task isunlikely to appeal tostudents at the givenlevel |
| **Your centre’s directions** | the centre gives clearage-appropriatedirections for students to engage in rich and relevant activity | the centre givesadequate directions for students to engage in worthwhile andrelevant activity | the relevance of thetask is questionablein relation tocurriculum and NCTM process demands | the task is not relevantin relation tocurriculum and NCTM process demands |
| **Cohesion and depth of centres** | the centres cohere*strongly* around acentral topic/idea, and direct a range of *rich* mathematical activity (content andprocesses) | the centres coherearound a centraltopic/idea, and direct a range of mathematicalactivity (content andprocesses) | the centres eithercohere around acentral topic/idea, ordirect a range ofmathematicalprocesses, but not both | the connectionsbetween the centres is loose, and they do not engage a range ofmathematicalprocesses |
| **Differentiation** | centres draw on an excellent variety of representations, learning modalities and learning styles, with varying levels of difficulty to allow all students to engage with the tasks | centres draw on an good variety of representations, learning modalities and learning styles, with varying levels of difficulty to allow students to engage with the tasks | centres draw on limited use of representations, learning modalities and learning styles, with varying levels of difficulty limiting the opportunity for all students to engage | centres does not draw on a variety of representations, learning modalities or learning styles, and does not allow all students to engage with the tasks |
| **Communication to peers** | engaging andknowledgeablepresentation of thecentres and of theaccompanying writing | solid and clearpresentation of thecentres and of theaccompanying writing | some aspects of thepresentation of thecentres and theaccompanying writing showed professionalism | the presentation of the centres and theaccompanying writing lacked professionalism |
| **Two Page Write-up** | **NCTM Process Standards** | demonstrates anexcellent understanding ofNCTM processes, and demonstrates how to assess them with the centres | demonstrates a verygood understanding of NCTM processes and demonstrates how to assess them with the centres | demonstrates someunderstanding ofNCTM processes with some misconceptionsin application toassessment with thecentres | demonstrates a lack of understanding ofassessing NCTMprocesses in application to thecentres |
| **Atlantic Canada Curriculum Connections** | lists central curriculumcorrelations with aclear and well structured plan forassessing students’achievement of theoutcomes | lists central curriculumcorrelations with acoherent plan forassessing students’achievement of theoutcomes | lists some curriculumcorrelations with asomewhat coherentplan for assessingstudents’ achievementof the outcomes | curriculumcorrelations do notseem to fit theactivities or the planfor assessing them isunrealistic |