

Holistic rubrics to evaluate students' understanding and performance

For Oral presentation

Criteria (Weighting)		
Scale	Understanding (60%)	Performance (40%)
4	Shows a sophisticated understanding of the relevant ideas or processes. The concepts, evidence, arguments, qualifications made, questions posed, and methods used are advanced, going well beyond the grasp of the subject typically found at this age level.	The performance or product is highly effective. The ideas are presented in an engaging, polished, clear and thorough manner, and are mindful for audience, context and purpose. The final product or performance shows high quality craftsmanship.
3	Shows a solid understanding of the relevant idea or processes. The concepts, evidence, arguments and methods used are appropriate for addressing the issues or problems. Response shows no misunderstandings of key ideas or overly simplistic approaches.	The performance or product is effective. The ideas are presented in a clear and thorough manner, showing awareness of the audience context and purpose.
2	Shows a somewhat naive or limited understanding of the relevant ideas or processes. The concepts, evidence, arguments and methods used are somewhat simple, crude or inadequate for addressing the issues or problems. Response may reveal some misunderstandings of key ideas or methods.	The performance or product is somewhat effective. Some problems with clarity, thoroughness and delivery are evident. It is unclear whether the audience, context and purpose have been considered.
1	Shows little apparent understanding of the relevant ideas or processes. The concepts, evidence, arguments and methods used are inadequate for addressing the issues or problems. Responses reveal major misunderstandings of key ideas or methods.	The performance or product is ineffective. One of two situations is evident. The performance is unpolished, providing little evidence of planning, practice and consideration of purpose and audience, or the presentation is so unclear and confusing that the key points are difficult to determine.

Jay McTighe and Grant Wiggins (1999)

The scale of the first rubrics will range from the naïve to a sophisticated level of understanding.

The second rubric will be a 4-point rating scale. The 4-point rating scale will evaluate the degree to which students understand the objectives of the performance tasks and the quality of their performance/oral presentation.

The scoring rubrics were designed according to only 5 facets of understanding to assess how students have applied their understanding in carrying out their performance tasks. The 6th facet: self knowledge is not included because this is a scoring rubric. It is difficult for self knowledge to be evaluated as it is too subjective and personal. It is difficult to get students to review their prejudice and to attach a score or grade for overcoming prejudices so as to achieve a better understanding of the issue. This is to show how effectively they have applied the knowledge they have learnt to the authentic learning tasks. Essentially, the students will be able to understand and interpret the problem faced in each performance task.

There was differentiation between the IDMI performance tasks in 2007 and 2008. In 2007, the tasks were very structured with a high level of scaffolding to guide the students. In 2008, to cater to the high-ability learners (BSP scholars), the tasks were designed with less scaffolding and structure.

STAGE 3: LEARNING PLAN

(WHERE TO)

Multiple Intelligences

Problem Based Learning

Learning Activities		
<p>L</p> <ol style="list-style-type: none"> 1. Begin with an entry question (What are the changes you make to adapt to the new school compound since we shift to the holding school) to hook students into the effect of change and transition. H 2. Introduce the Essential Questions (EQ) and discuss the 4 authentic performance tasks. Divide the students into their performance tasks group based on their multiple intelligences profile. W 3. Note: Key vocabulary terms are introduced (sustainability, adaptation, transition, tea culture, food culture, the minorities) as needed by the various performance tasks. E 4. Present research skills lesson to equip students with the necessary skills to conduct literature review. Students are given websites and readings materials to equip them with the necessary knowledge and skills for the performance tasks. E 5. As an ongoing activity, 	<ol style="list-style-type: none"> 1. Linguistic (listening, speaking) 2. Linguistic (speaking, listening) 3. Linguistic (listening) 4. Linguistic (listening) 5. Intrapersonal Linguistic (listening) Interpersonal 	<ol style="list-style-type: none"> 1. Meet the problem. (Introduction to the scenario) 2. Meet the problem 3. Meet the problem (students armed with the key facts they need to begin) 4. Problem analysis and rephrasing problems. Define the problem (understand the problem and become stakeholder) Hypothesizing (focus on what they need to do) Gather the facts (organize facts using KND chart) Researching

<p>students keep a personal log of their learning experience, and as a team, a log of the research findings. E</p> <p>6. Present research methodology skills module (random sampling, graphical presentation of data) to teach the students how to draft questions for surveys and the technique of interview and select the right target group. Students design suitable survey questions. E</p> <p>7. Student share their survey questions and survey other groups of students who did not design the same survey questions. Students then do peer evaluation and peer reflection on the survey questions and give suggestions to further improve the questions. E2, R</p> <p>8. Students meet their teacher mentors regularly (once or twice a week) to discuss the progress of their projects. Teacher mentors will guide them in the process and encourage them to rethink, review and evaluate their progress. Teacher will be assessing their level of understanding using analytic rubric. R,E2</p>	<p>6. Linguistic Logical/mathematical</p> <p>7. Linguistic (speaking) Interpersonal (survey)</p> <p>8/9. Interpersonal (group discussion) Logical (hypothesize about the problem)</p>	<p>Gathering facts</p>
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<p>9. Students listen to and clarify their doubts with the guest speakers (lecturers from Sichuan University) on the topics related to their performance tasks. E</p> <p>10. Students visit Sichuan Tea house, Sichuan local restaurant, Sichuan Minority village and environmental green building to conduct onsite studies of their performance tasks. E</p> <p>11. Students consult teacher mentors (once a day) and Sichuan University lecturers (one session for each task) on their performance tasks. Mentors guide them in the process and encourage them to rethink, review and evaluate their progress. R, E2</p> <p>12. Students collate and analyse the data collected. They present their findings to a panel of teachers. Teachers evaluate and give feedback on the presentation. Teachers assess their presentations according to the rubrics. Other students comment and give feedback to the presenting groups. Teacher will use the holistic rubric to assess student understanding and performance. E2,</p>	<p>10. Interpersonal Linguistic (refine the statement of the problem in as precise language as possible)</p> <p>10. Kinesthetic(fieldtrip) Naturalistic</p> <p>12. Linguistic (phrasing the questions correctly to suit the aim of the research) Logical Musical</p>	<p>12. Generating alternatives Advocating solutions</p>
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<p>T, R 13. Conclude the unit with student self evaluation regarding their learning goals and learning outcome. Have each student write a 500 word reflection. E2, T</p>	<p>13. Intrapersonal</p>	
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LEARNING PLAN

In stages 1 and 2 of our framework, we identified the desired results and determined the evidence of understanding. In stage 3, we planned appropriate learning experiences and instructions in order for the students to perform effectively and achieve the desired results. The planning was done using **WHERE TO** as our guiding framework. The learning activities were crafted to cater to the students’ multiple intelligences, thus ensuring an enhanced learning experience. We divided the learning activities into 2 parts: lectures and mentoring sessions conducted by both the Dunman High School teacher mentors and the Sichuan University lecturers and learning journeys (on-site visits) in Sichuan.

The highlight of the learning plan is the learning journeys. The students had the opportunity to visit local tea houses, waste treatment plants and the village of the Sichuan minority groups. The students were able to experience the life and cultures of the Sichuan people.

The students also designed suitable survey questions to obtain data for their research and investigation. They then collated and analysed the data accordingly and made interesting recommendations for the problems. The students then presented their findings to a panel of teachers.

The project was concluded with a self evaluation of the students' learning experiences. This enabled them to reflect on the things they learnt and experienced in the process.

CONCLUSION

This project has been a fruitful learning experience for the authors. As educational practitioners, it has always been our mission to find ways to improve student learning. The authors understand the importance of real and deep understanding in enhancing the whole learning experience for any learner. Each of the leading educational approaches, UbD, PBL and MI has its own merits in catering to the different learning needs and styles of the individual learner. To increase student understanding and to improve students' motivation to learn, the authors have experimented with the idea of using this tri-dimensional approach to plan and design the IDMI project. The learning experience for the learner is thus enhanced and more effective.

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