│ Chemistry Curriculum and Methodology A

Summative Task: Resource Analysis

Select an appropriate resource which may be incorporated into the teaching of SACE Stage 1 or Stage 2 Chemistry (this will assist in the production of the final Topic Folio).

Analyse the resource according to the criteria outlined in the Analysis Table.

Prepare a multimedia presentation (may be in the form of a flipped recording) based on your analysis of the resource (approximately 3 - 5 minutes) to share in the following Tutorial.

Assessment

The Analysis Table and Multimedia Presentation are to be submitted electronically via MyUni (15%). The digital resources will be shared through a Discussion Board to extend the resource repository being developed. You will be asked to post comments in 3 active discussions (5%) to demonstrate further evidence of collaboration and engagement with the task.

Course Learning Outcomes

* Demonstrate deep knowledge and understanding of the complexity of the discipline and the teaching strategies of the learning area.
* Assemble a range of subject-appropriate resources, including online, that engage a diversity of students in their learning.
* Integrate relevant research and theory to develop a broad repertoire of subject-appropriate teaching and learning strategies, including use of ICT.
* Demonstrate communication skills to present a clear and coherent exposition of knowledge and ideas to a diverse range of students

Assessment Rubric Student:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Assessment Design Criteria** | **Fail**  **0 < F < 49%** | **Pass**  **50 < P < 64%** | **Credit**  **65 < C < 74%** | **Distinction**  **75 < D < 84%** | **High Distinction**  **85 < HD < 100%** | **Weighting** |
| **Selection of resource** | Identifies and selects a resource of limited relevance | Identifies and selects a mostly relevant resource | Identifies and selects a relevant resource | Identifies and selects a highly relevant resource | Discernibly identifies and selects a highly relevant resource | 2.5% |
| **Analysis of accessibility, relevance and suitability** | Limited analysis | Analysis of relevance and suitability | Clear analysis of relevance and suitability | Clear and comprehensive, analysis of relevance and suitability | Comprehensive, clear and insightful analysis of relevance and suitability | 5% |
| **Connection to curriculum & methodology** | Constructs limited connections to curriculum and pedagogy | Constructs connections to curriculum and pedagogy | Constructs clear connections to curriculum and pedagogy | Constructs clear and detailed connections to curriculum and pedagogy | Constructs clear, detailed and perceptive connections to curriculum and pedagogy | 5% |
| **Communication** | Limited communication of findings | Communicates a range of findings with the use of ICLT | Communicates a range of findings effectively with appropriate use of ICLT | Communicates a range of findings highly effectively with appropriate use of ICLT | Communicates a range of findings highly effectively with highly appropriate use of ICLT | 2.5% |
| Result: | 15% |
| **Discussion board** | 5% | | | | | |
| Comments: |  | | | | | |

Analysis Table

|  |  |
| --- | --- |
| **Resource** | To quote the website *“Scootle is a national digital learning repository which provides Australian teachers with access to more than 20,000 digital learning items, provided by a wide array of contributors and aligned to core areas of the Australian Curriculum.”* |
| **Link** | https://www.scootle.edu.au |
| **Accessibility** | *The majority of the resources are posted by “Education Services Australia” (ESA) and made available under a Creative Commons Licence, which essentially means you are free to use it so long as you attribute it to ESA. Apparently there is also third party content on there (you can post content yourself) and then it depends on the conditions placed on it by the contributor, but honestly I couldn’t find any examples of this, so for all intents and purposes all the resources are freely available.*  *You don’t need an account to access any of the resources, but if you are a teacher at essentially any Australian school, or a trainee teacher, you can register for an account and then you can make “lesson plan” style things for students to work through made out of resources on the site, contribute resources of your own, write a blog, etc. etc.* |
| **Relevance** | *The resources are directly aligned with the Australian curriculum, so up to a year 10 level they are directly relevant and can be browsed by Australian curriculum topic, etc --- very convenient. For SACE they could be used for revision, or even as a resource to give to students needing to catch up on some required knowledge. They provide direct content that could be used for teaching as-is, or as inspiration for designing your own classes around them.* |
| **Suitability** | *As mentioned above scootle would probably mostly be relevant to Stage 1 for establishing/ reviewing assumed knowledge and getting everyone on the same page up to a year 10 level, although if someone is particularly behind in Stage 2 this might still be relevant.* |
| **Application** | For example, this resource:  <http://www.scootle.edu.au/ec/viewing/L2293/index.html>  Could be used as an introduction to “Subtopic 1.4: The periodic table” of Stage 1 SACE. It is an interactive online multimedia (essentially, game) and introduces basic concepts like the distinction between elements and compounds (things made of several elements), but then goes on to explore concepts around the periodic table by posing hypothetical scenarios such as “Imagine we live in an alternate universe made of different elements with different properties, how might you arrange them into a table, and when you do, do you notice any patterns in those properties? This how the periodic table works, and we can then link these ideas to other ideas introduced like numbers of protons and such to construct the actual periodic table of our universe. |