



# ASEF Classroom Network #ASEFClassNet School Collaboration 2019

## Proposal

### 1. Title of the Online Collaboration (Max. 6 words)

The Gallium Spoon (and other elements in the periodic table)

### 2. Name and contact details of project co-ordinator(s)

Mr Daniel AGUIRRE  
Science teacher  
Pedro Poveda School  
Spain  
E: d.aguirre3@gmail.com  
W: www.colegiopedropoveda.org

### 3. School description (Max. 30 words)

Pedro Poveda School is situated in Jaén (Spain). Students are from 3 to 16 y.o. They are middle class and a lot of importance is given to offer them new ways to open their minds to the outside world.

### 4. Summary of the Proposed Online Collaboration (Max. 200 words)

2019 is the International Year of Periodic Table of Elements. We want to celebrate this year studying some interesting facts about it, for example, Gallium has a low fusion point, Hydrogen has a low density but is very dangerous, and other interesting elements. Every school will choose one or several elements to work on and will develop the history of the element (when it was discovered and how), its main characteristics, some experiments with it, some applications and more.

The students will prepare some reports, videos, pictures, presentations etc. With all this information gathered by the students, a game on the Periodic Table will be prepared, with questions about elements studied. The game will be designed in different forms depending on the school (table game, scratch coding game, an app for a mobile phone, etc.).

Finally, we will use Augmented Reality (AR) to insert every task done in a Periodic Table, that will be activated using the app Aurasma (a very easy-to-use software to create augmented reality). Every school will see the work done by other schools through AR, where all the work done will be featured.

During this project, students will have the opportunity to interact with each other through a Facebook group. The project can be adapted to the technical knowledge of every teacher and will be a good opportunity for teachers to learn how to use these technologies with the students.

**5. The Online Collaboration falls under the main themes of:  
Please state "1" to "3" in level of relevance**

|  |  |
|--|--|
| <input type="checkbox"/> Arts & Culture                        | <input type="checkbox"/> Health                            |
| <input type="checkbox"/> Business & Entrepreneurship           | <input checked="" type="checkbox"/> 3 History              |
| <input checked="" type="checkbox"/> 2 Education                | <input type="checkbox"/> Media                             |
| <input type="checkbox"/> Environment & Sustainable Development | <input checked="" type="checkbox"/> 1 Science & Technology |
| <input type="checkbox"/> Others. Please specify below:         |  |

**6. Duration of the Online Collaboration (Please state start and end date):**

|            |   |                |
|------------|---|----------------|
| Start Date | : | 7 January 2019 |
| End Date   | : | 7 July 2019    |
| Duration   | : | 6 months       |

**7. Expected no. of schools/students involved and level of language and ICT skills**

|                          |   |                             |
|--------------------------|---|-----------------------------|
| No. of Schools in total  | : | More is better. At least 4  |
| No. of Students in total | : | Very adaptable. At least 20 |
| Students Age Group       | : | 10-17                       |
| Level of English         | : | Intermediate                |
| Level of ICT Skills      | : | Intermediate                |

**8. ICT tools/software required  
Please tick (✓) as appropriate)**

| <u>Word processing software</u>                          | <u>Video conference tools</u>   | <u>Storage tools</u>                             |
|--|---------------------------------|--|
| <input type="checkbox"/> Adobe Acrobat Reader            | <input type="checkbox"/> Skype  | <input type="checkbox"/> Dropbox                 |
| <input checked="" type="checkbox"/> Google Docs/Sheets   | <input type="checkbox"/> Viber  | <input checked="" type="checkbox"/> Google Drive |
| <input checked="" type="checkbox"/> Microsoft Word/Excel | <input type="checkbox"/> Vyew   | <input type="checkbox"/> iCloud                  |
| <input type="checkbox"/> Scribd                          | <input type="checkbox"/> Wechat |  |
| <input type="checkbox"/> Wordpress                       |                                 |  |

|  |  |   |
|--|--|---|
| <p><u>Social media</u></p> <input type="checkbox"/> Ask.fm<br><input checked="" type="checkbox"/> Facebook<br><input type="checkbox"/> Flickr<br><input type="checkbox"/> Instagram<br><input type="checkbox"/> Pinterest<br><input type="checkbox"/> Tumblr<br><input type="checkbox"/> Twitter<br><input type="checkbox"/> Weibo | <p><u>Image editing software</u></p> <input type="checkbox"/> Adobe Illustrator<br><input type="checkbox"/> Adobe Lightroom<br><input type="checkbox"/> Adobe Photoshop<br><input type="checkbox"/> BeFunky (online)<br><input type="checkbox"/> Sketch (Mac only) | <p><u>Online collaboration</u></p> <input type="checkbox"/> Mindmeister<br><input type="checkbox"/> Slack<br><input type="checkbox"/> Telegram<br><input checked="" type="checkbox"/> Trello<br><input type="checkbox"/> Padlet<br><input type="checkbox"/> Microsoft Teams |
| <p><u>Video/audio editing software</u></p> <input type="checkbox"/> Adobe Premiere<br><input type="checkbox"/> Audcity<br><input type="checkbox"/> Garageband (Mac only)<br><input type="checkbox"/> Soundcloud<br><input checked="" type="checkbox"/> Windows Movie Maker<br><input checked="" type="checkbox"/> Youtube          | <p><u>Presentation</u></p> <input checked="" type="checkbox"/> Google slides<br><input checked="" type="checkbox"/> Microsoft Powerpoint<br><input checked="" type="checkbox"/> Prezi  | <p><u>App development</u></p> <input type="checkbox"/> Adobe Flash builder<br><input type="checkbox"/> Alpha Software<br><input type="checkbox"/> Appy Pie  |
| <p><u>Others (please specify):</u></p> <p>Optional: Scratch, App Inventor, Aurasma</p>   |  |   |

**9. Other resources needed:**  
(Please tick (✓) as appropriate)

|   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Camera                  | <input type="checkbox"/> E-reader               | <input type="checkbox"/> OHP                     |
| <input checked="" type="checkbox"/> Desktop Computer/Laptop | <input type="checkbox"/> GoPro                  | <input checked="" type="checkbox"/> Smart Phones |
| <input type="checkbox"/> Digital Projector                  | <input type="checkbox"/> Interactive Whiteboard | <input type="checkbox"/> Tablet                  |
| <input type="checkbox"/> Voice Recording Devices            | <input type="checkbox"/> NA                     |  |
| <p>Others (please specify):</p>                             |   |  |

## 10. Learning objectives and outcomes for teachers and students

(Please list at least 3 learning objectives and outcomes for teachers and students respectively.)

| Learning Objectives  | Outcomes   |
|--|--|
| <b>Teachers should join to:</b>  | <b>For Teachers:</b>   |
| 1. Celebrate the Periodic Table of Elements.                               | 1. Better knowledge of ICT tools.  |
| 2. Teach using ICT and new methodologies.                                  | 2. Learn about Science in other countries.                                       |
| 3. Learn new techniques useful for a lot of different subjects.            | 3. Collaborate with teachers of the same subject but with different backgrounds. |
| <b>Students will learn to:</b>   | <b>For Students:</b>   |
| 1. The history of the Periodic Table and some elements.                    | 1. Presentations, videos, reports about chemical elements.                       |
| 2. How to create interactive lessons with Augmented Reality, coding, apps. | 2. A game based on the Periodic Table.   |
| 3. Collaborate with other students and enjoy the topic of Chemistry.       | 3. Learn how to work in groups, know other students from other cultures.         |

## 11. Timeline and activities of the Online Collaboration

| Description  | Main Coordinator | Teachers | Students |
|--|------------------|----------|----------|
| <b>Phase1 (January 2019)</b>   |                  |          |          |
| ▪ Set-up Facebook group and invite members to the group  | ✓                |          |          |
| ▪ Self-introduction by all participating members   |                  | ✓        | ✓        |
| ▪ Definition of groups. Every school choose one or several elements to work on it (at least one element).                                    | ✓                | ✓        |          |
| ▪ Distribution of elements among schools to avoid repetitions  | ✓                |          |          |
| <b>Phase 2 (February to March 2019)</b>  |                  |          |          |
| ▪ Research about the element/s chosen and preparation of presentations, pictures, videos about it  |                  |          | ✓        |
| ▪ Upload this information on Facebook group  |                  | ✓        | ✓        |
| ▪ Students comment the works done by others  |                  |          | ✓        |
| <b>Phase 3 (April to May 2019)</b>   |                  |          |          |
| ▪ Create questions about the element analyzed. Decide the way to use all the questions (table game, scratch game, app for a mobile phone...) |                  | ✓        | ✓        |

| <u>Description</u>   | <u>Main Coordinator</u> | <u>Teachers</u> | <u>Students</u> |
|--|-------------------------|-----------------|-----------------|
| <ul style="list-style-type: none"> <li>▪ Prepare the game with the questions of all groups.</li> </ul>                 |                         | ✓               | ✓               |
| <b>Phase 4 (End May 2019)</b>  |                         |                 |                 |
| <ul style="list-style-type: none"> <li>▪ Prepare the interactive table using Augmented Reality with Aurasma</li> </ul> | ✓                       | ✓               | ✓               |
| <ul style="list-style-type: none"> <li>▪ Enjoy and play with our new periodic table</li> </ul>                         | ✓                       | ✓               | ✓               |
| <b>Phase 5 (End June 2019)</b>   |                         |                 |                 |
| <ul style="list-style-type: none"> <li>▪ Feedback and evaluation</li> </ul>  | ✓                       | ✓               | ✓               |

For further details about this online collaboration, please contact the coordinator directly



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