Hague Ethical Guidelines Jigsaw Exercise
By Alastair Hay

What is a Jigsaw Exercise?
The Jigsaw exercise is a well-recognised interactive teaching tool; ideal for encouraging everyone to participate and helpful if you have some in the group who are uncomfortable voicing their opinions.

This exercise is a great way to discuss topics which may, on first glance, appear somewhat dry – such as the principles in the Hague Ethical Guidelines.

Exercise
The exercise is configured for 36 participants but can be adapted for multiple group sizes, as long as you keep numbers similar in each group.

Example Combinations:
- 4 groups of 4, discuss 4 principles.
- 3 groups of 3, discuss 3 principles.
- 5 groups of 5, discuss 5 principles, etc.

See example slides on how to run the exercise with 36 participants.

It is also possible to run groups in parallel. This exercise has been done with 3 parallel groups comprising a total of 98 participants.

Helpful Tips
1. Working with larger groups requires much more planning and we suggest you do the exercise with no more than 36 participants when you first try it.
2. Mix individuals up so that those who know one another are allocated to different groups. This approach will encourage everyone to participate.

Running the Exercise
1. Create your groups, as indicated above, and allocate each group a number and a letter, to be displayed visibly on each table. So table 1 could also be table A.
2. Give each group a separate principle to discuss. Emphasise the need for each member of the group to become an expert on the principle, as they will each have to argue its importance in the next step of the exercise.
3. Give the groups 15 to 20 minutes to familiarise themselves with the principle and the reasons why it is important. Some may take notes, but this is not mandatory.
4. While they are discussing their principle go round each table and assign each member of the group a letter (A to C for 3 person groups, A to D for 4 person groups etc.). Remind everyone to keep the letter safe as the lettering will determine the next group they are allocated to.

5. Once 15 to 20 minutes have passed, and the groups feel they have mastered their principle, ask individuals to move so that all the A’s sit together, all the B’s together, all the C’s etc. at the tables that matches their letter.

**Helpful Tip:** If you are not sure if 15 to 20 minutes is enough time for the groups to master their principles, a good rule of thumb to help you decide when to start the next step in the exercise is when the noise in the room dies down. This generally indicates that discussion is starting to flag a little. It is always better to move groups around after 2 or 3 have concluded and feel they have mastered the principle. Moving people around at this stage also helps to prevent anyone losing interest.

6. Once everyone has moved into their new group, ask each member of the group to make a case for why their principle is the most important.

Write the rules of the debate on a white board – or another visible medium – and go over them with the whole class, to ensure everyone has a chance to make and defend their case.

**Rules of Debate**

- All participants must have the opportunity to argue their case;
- Participants may ask questions, challenge others on their points, and ask for clarifications;
- Participants must listen to other points of view.
- Participants can attempt to modify the positions of others in their group, or can modify their own positions, when appropriate.

During this stage of the exercise noise levels are expected to rise in the room, this is a good sign as it indicates full participation. Hopefully there will also be a fair amount of laughter as inconsistencies are highlighted in each case.

**Helpful Tip:** You may want to circulate to ensure that discussions are going well. You should allow sufficient time for a good exchange of views, before closing the debate.

7. When you judge groups have finished exchanging views, ask participants to go back to their original groupings i.e. all the 1’s together, all the 2’s etc.
8. Ask each participant to tell the others on the table what they discussed and learned from their letter groups.
9. Each group should then choose a representative/rapporteur to relay the groups’ views to the whole class.
10. Once everyone has recounted their discussions, groups should consider if they would change their views. Is their own principle still the most important or have they modified their views in any way? If they have changed, what was it that convinced them to adopt a new position?
11. As the final step in the exercise, ask each group representative/rapporteur to explain to the class what their principle was and what their view is now - after the various discussions. If views changed have them explain why they changed.

Helpful Tip: After the initial group views have been presented, try and turn this last part of the exercise into a class discussion. Draw as many people into the discussion as you can. Attempt to identify any standout lessons and the importance of this exercise as an opportunity to hear other points of view.

SUM UP the discussion
If the exercise has gone well, and all have had an opportunity to talk, the consensus is likely to be that all the principles are equally important and a good framework within which to work.

List the 9 principles of The Hague Ethical Guidelines:

- **Core element.** Achievements in the field of chemistry should be used to benefit humankind and protect the environment.
- **Sustainability.** Chemistry practitioners have a special responsibility for promoting and achieving the UN Sustainable Development Goals of meeting the needs of the present without compromising the ability of future generations to meet their own needs.
- **Education.** Formal and informal educational providers, enterprise, industry and civil society should cooperate to equip anybody working in chemistry and others with the necessary knowledge and tools to take responsibility for the benefit of humankind, the protection of the environment and to ensure relevant and meaningful engagement with the general public.
- **Awareness and engagement.** Teachers, chemistry practitioners, and policymakers should be aware of the multiple uses of chemicals, specifically their use as chemical weapons or their precursors. They should promote the peaceful applications of chemicals and work to prevent any misuse of chemicals, scientific knowledge, tools and technologies, and any harmful or unethical developments in research and innovation. They should disseminate relevant information about national and international laws, regulations, policies and practices.
• **Ethics.** To adequately respond to societal challenges, education, research and innovation must respect fundamental rights and apply the highest ethical standards. Ethics should be perceived as a way of ensuring high quality results in science.

• **Safety and Security.** Chemistry practitioners should promote the beneficial applications, uses, and development of science and technology while encouraging and maintaining a strong culture of safety, health, and security.

• **Accountability.** Chemistry practitioners have a responsibility to ensure that chemicals, equipment and facilities are protected against theft and diversion and are not used for illegal, harmful or destructive purposes. These persons should be aware of applicable laws and regulations governing the manufacture and use of chemicals, and they should report any misuse of chemicals, scientific knowledge, equipment and facilities to the relevant authorities.

• **Oversight.** Chemistry practitioners who supervise others have the additional responsibility to ensure that chemicals, equipment and facilities are not used by those persons for illegal, harmful or destructive purposes.

• **Exchange of information.** Chemistry practitioners should promote the exchange of scientific and technical information relating to the development and application of chemistry for peaceful purposes.