

GREEN CHEMISTRY EDUCATION PHILOSOPHY STATEMENT

By teaching, learning and practicing chemistry through the framework of green chemistry, we can achieve long-term sustainability and meaningful positive change for a healthier world.



Green Chemistry
Teaching and Learning
Community



- Is central to solving global sustainability challenges (including the [United Nations Sustainable Development Goals \(U.N. SDGs\)](#)).
- Is a morally and ethically responsible approach to science and chemistry.
- Is proactive, innovative, and cost effective.
- Can and should be integrated across all of chemistry.

AS A RESULT,
WE BELIEVE IT IS
CRITICAL THAT
GREEN CHEMISTRY
BE INCORPORATED
INTO EDUCATION
BECAUSE...

- Education is key to creating positive change in society.
- It can help create a holistic, systems-based approach to learning and practice.
- It can inspire and empower individuals to take action toward making our world better.
- It can equip the current and future workforce with the knowledge and skills to make a difference.
- It can help to unite and elevate communities, and support positive perceptions of chemistry.
- It allows for safer approaches to chemistry research and education.
- Education and green chemistry are both agents for positive change and must work together to create a better future.

CONTEXT

This statement of philosophy regarding green chemistry in education was developed as a collaborative effort by Beyond Benign and the Green Chemistry Teaching and Learning Community (GCTLC) Leadership Committee, a group of 19 experts from across the education continuum, as well as from industry. The authors agree that green chemistry is a critical component of Science, Technology, Engineering, and Mathematics (STEM) education and as such, it should be a foundational framework for students studying in these fields.

Green chemistry is defined as "the use of a set of principles that aim to reduce and/or eliminates the use and/or generation of hazardous substances in the design, manufacture, and application of chemical products." The terms "we", "us", and "our" below refers to the collective education community, as we strive to regularly update the philosophy based on feedback from our community members from all different geographic regions and with all different backgrounds, perspectives and experiences.