

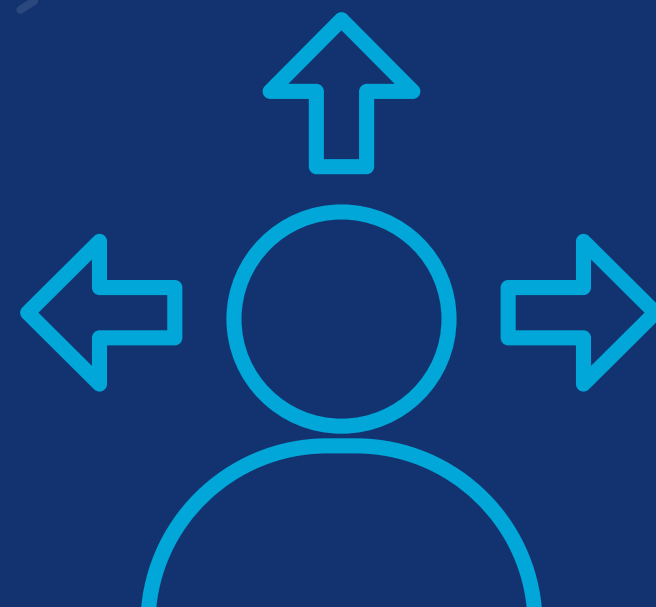


Government Science
& Engineering



GSE Leadership Values Toolkit

A guide to navigating the dynamic and ever-evolving landscape of science and engineering leadership through the GSE leadership values.



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1 Introduction

This toolkit for the GSE leadership values is designed to equip aspiring leaders in the fields of science and engineering with the essential knowledge, skills, and tools required to excel in leadership roles.

Whether you are a seasoned professional seeking to enhance your leadership capabilities or at the early stages of your career, this toolkit will help you to develop into a future leader.

In this toolkit you will find details on GSE leadership values, expected standards, questions for self-assessment, and strategies and practical tools to help you become an empowering GSE leader.



2 Background & purpose

The leadership values are part of the GSE profession's strategy to build science and engineering capability across the government and enable science and engineering professionals to demonstrate technical leadership together with people leadership at all career stages. The leadership values have been developed through an inclusive collaboration with GSE members across the Civil Service and wider stakeholders.

The leadership values support GSE members in their personal and professional development by helping them understand and practice the definitions and standards provided, which are aligned with the Civil Service Leadership Statement of being inspiring, confident and empowering.



3 How to use the toolkit

Each leadership value has a definition and standard, self-assessment questions, and suggested actions in the form of tools, techniques and strategies to guide you in your development actions.

You can use the toolkit at your own pace. The resources are designed to be adaptable to your individual needs and circumstances.

We suggest using it:

- to review and reflect before your performance appraisals
- when considering your career development, for example before a career conversation or mentoring session
- as a line manager, to reflect on your team members' skills and development needs for their leadership journey and provide support

Start by:

- reading each GSE leadership value and expected standards

- reflecting on your experiences and skills that relate to each standard and your leadership goals and current challenges
- watching each leadership values video to hear other leaders' perspectives and experiences
- work through the suggested questions for self-assessment against each set standards – these questions can help you reflect on your actions and attitudes related to the expected standards and identify areas where you can further improve and align with these principles
- assessing which of the tools, techniques and strategies are most useful for your development and building these into your development plan (these resources are designed to be adaptable to your individual needs and circumstances – discuss with your line manager or mentor if helpful)
- remembering that ongoing self-awareness and continuous learning are key elements for your personal growth in these areas

4 Leadership value 1: Inclusive

Definition: A GSE leader values and respects the expertise of a range of specialists and seeks a diversity of views across different disciplines and professions.

Leadership value 1: Inclusive



Expected standards	Self-assessment questions	Suggested actions: Tools, techniques and strategies to support development
<p>They appreciate and visibly advocate for the value of science and engineering in government.</p>	<p>Value of science and engineering:</p> <p>Do I actively promote the importance of science and engineering in government decisions?</p> <p>Am I consistently supportive of initiatives that advance scientific and engineering knowledge in government policies?</p>	<ul style="list-style-type: none"> • Keep up to date on the latest developments in science and engineering in government and externally through reputable sources and publications. • Engage in ongoing education and <u>Civil Service Learning</u> related to scientific and engineering and encourage your team to adapt learning agility approach. • Actively participate in relevant discussions, build an understanding of the importance of science and engineering in your team, and advocate for embedding science and engineering advice at the heart of government decision making.

Leadership value 1: Inclusive



Expected standards	Self-assessment questions	Suggested actions: Tools, techniques and strategies to support development
<p>They are humble, guarded against any bias, actively seek diverse perspectives and welcome views that may challenge their own, regardless of seniority.</p>	<p>Open-mindedness and diversity:</p> <p>Do I actively seek out and listen to diverse perspectives, even if they challenge my own views?</p> <p>Am I open to changing my mind when presented with compelling evidence or differing viewpoints?</p>	<ul style="list-style-type: none"> • Use diversity and inclusion training programs and GSE resources to enhance your awareness and understanding. • Join your department diversity and inclusion network or GSE D&I Action Groups (DIAG) Practice active listening during meetings and discussions, allowing all participants to express their views. • Create a culture where dissenting opinions are valued and seek out mentors or colleagues who can challenge your thinking.
<p>They value and respect the expertise of a range of specialists.</p>	<p>Respect for specialist expertise:</p> <p>Do I show respect for the knowledge and expertise of specialists in various fields?</p> <p>Am I willing to collaborate with and learn from different specialists, even when their expertise differs from my own?</p> <p>Do I encourage my team to do the same?</p>	<ul style="list-style-type: none"> • Establish networks and connections with specialists in various fields through professional organisations or conferences. • Collaborate on cross-disciplinary projects to gain exposure to different areas of expertise. • Engage with the GSE profession, including Community of Practice meetings, and consider joining the GSE Shadow Board. • Acknowledge and celebrate the contributions of specialists within your organisation, e.g. through joint presentations and producing case studies for GSE, Civil Service or professional institutes' publications.

Leadership value 1: Inclusive

**Expected standards**

They champion inclusivity and diversity, fostering an environment where people feel safe to ask questions, admit errors, share concerns, and ask for help.

Self-assessment questions**Inclusivity and diversity:**

Do I create an environment where people feel safe to ask questions without fear of judgment?

Am I approachable and open to discussions where others may admit errors or share concerns?

Do I actively work to foster inclusivity and diversity within my team or organisation?

Suggested actions: Tools, techniques and strategies to support development

- Utilise diversity and inclusion surveys and assessments to gauge the inclusivity of your workplace. Speak to your departmental HR Business Partner or diversity and inclusion lead for information.
- Implement regular check-ins or feedback sessions with team members to create a safe space for sharing concerns and suggestions.

Resources

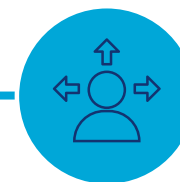
[Vlog on GSE leadership value: Inclusive](#) by Robert Bradburn, Chief Scientist, Director of the Chief Scientist's Group and head of the Environment Agency's Science Profession.

[Blog on GSE leadership value: Inclusive](#) by Dr Shabana Haque, OBE, Deputy Director Research Infrastructure, Security and Position, Navigation and Timing (PNT), DSIT.

5 Leadership value 2: Decisive

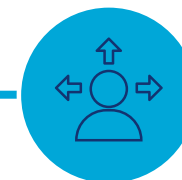
Definition: A GSE leader makes timely, evidence-based decisions under conditions of uncertainty and complexity.

Leadership value 2: Decisive



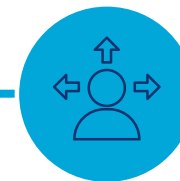
Expected standards	Self-assessment questions	Suggested actions: Tools, techniques and strategies to support development
<p>They can evaluate, weigh, and integrate different sources of empirical evidence alongside wider policy, financial or operational considerations to make informed decisions under conditions of uncertainty.</p>	<p>Evaluating and integrating evidence:</p> <p>Can I effectively assess and weigh empirical evidence from various sources when making decisions?</p> <p>Do I consider broader policy, financial, and operational factors with key data when making choices and decisions, especially in uncertain situations?</p>	<ul style="list-style-type: none"> • Use of statistical analysis software, data visualisation tools, literature review databases, and wider <u>GORS</u> resources. • Apply <u>systems thinking</u> to understand complex systems and how different pieces of evidence impact decisions. • Form interdisciplinary teams to ensure diverse perspectives and expertise are considered in decision-making.

Leadership value 2: Decisive



Expected standards	Self-assessment questions	Suggested actions: Tools, techniques and strategies to support development
<p>They can update and communicate their understanding when new evidence emerges.</p>	<p>Updating and communicating understanding:</p> <p>Am I proactive in updating my understanding and decisions when new evidence becomes available?</p> <p>Do I communicate changes in my views or decisions transparently to relevant stakeholders?</p>	<ul style="list-style-type: none"> • Take the GSE learning modules on Communicating Science and Engineering Advice. • Establish a regular review process for new evidence, decision outcomes and update decisions as needed. • Encourage a culture of continuous learning and networking for information sharing within your team and organisation.
<p>They are pragmatic and realistic about what is possible, and are able to make optimal choices that maximise desired outcomes given resource and organisational constraints.</p>	<p>Pragmatism and realism:</p> <p>Can I make practical and realistic decisions that maximise desired outcomes within the constraints of available resources and organisational limitations?</p> <p>Do I prioritise and allocate resources effectively to achieve the best possible results?</p>	<ul style="list-style-type: none"> • Use decision analysis tools and departmental cost-benefit analysis templates, working with relevant corporate centre colleagues. Share good practice across GSE profession. • Complete the Futures training to understand the range of tools and methodologies available. • Use Futures approach to scenario planning to explore a range of potential outcomes and resource allocation strategies to make pragmatic decision. • Prioritise projects or initiatives based on their alignment with organisational goals and available resources.

Leadership value 2: Decisive

**Expected standards**

They create the best environment for analysis to help support evidence-based decision making.

Self-assessment questions**Creating an analytical environment:**

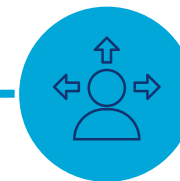
Have I established an environment in which data analysis and evidence-based decision-making are encouraged and supported?

Do I provide my team or organisation with the necessary tools, resources, and training to excel in data-driven decision making?

Suggested actions: Tools, techniques and strategies to support development

- Data analytics platforms and tools for data-driven decision support, e.g. Microsoft Power BI, Google Analytics etc.
- Connect with Analysis Function and your departmental colleagues to learn and share good practice.
- Implement training programs on data literacy, data tools and analytical skills to build capability and performance.
- Find out what your department data governance policies are and assess your own area.

Leadership value 2: Decisive

**Expected standards**

They are calm, balanced and objective under pressure.

Self-assessment questions**Remaining calm and objective under pressure:**

Am I able to maintain a calm and composed demeanour when faced with high-pressure situations or difficult decisions?

Do I consciously strive to maintain objectivity and avoid making decisions based solely on emotional reactions in stressful circumstances?

Suggested actions: Tools, techniques and strategies to support development

- Develop decision-making protocols that include steps for assessing decisions under pressure and seeking input from trusted colleagues or mentors.
- Reflect and make a note of situations when pressure and stress might affect your decision-making. Discuss ways to mitigate with your manager, mentor or trusted colleague.
- Take mindfulness and stress management training to remain stay focused. Use your internal departmental resources.

Resources

Vlog on GSE leadership value: Decisive by Natasha Grant, Deputy Director in the COBR Unit, CO.

Blog on GSE leadership value: Decisive by Dr Jane Williams, Security, Resilience and Strategy, Government Office for Science.

6 Leadership value 3: Integrity

Definition: A GSE leader is open, honest and uses established methods in research which reflects rigour and transparency in the process.

Leadership value 3: Integrity



Expected standards	Self-assessment questions	Suggested actions: Tools, techniques and strategies to support development
<p>They apply the scientific method to their work, encouraging scientific thinking and inspiring their team to seek knowledge.</p>	<p>Applying the scientific method:</p> <p>Do I consistently apply the principles of the scientific method, including hypothesis testing and data-driven decision-making, in my work?</p> <p>Am I proactive in promoting scientific thinking and encouraging my team members to seek knowledge and explore new ideas?</p>	<ul style="list-style-type: none"> • Use The Concordat to Support Research Integrity. Use relevant software for organising data and findings. • Implement regular research meetings or brainstorming sessions to encourage scientific thinking and idea sharing. • Foster a culture of curiosity and experimentation within your team by providing psychological safety, where failures are viewed as opportunities for learning.

Leadership value 3: Integrity



Expected standards	Self-assessment questions	Suggested actions: Tools, techniques and strategies to support development
<p>They are committed to upholding the highest research standards as laid out in The Concordat to Support Research Integrity.</p>	<p>Commitment to research integrity:</p> <p>Do I actively uphold the highest research standards as outlined in The Concordat to Support Research Integrity?</p> <p>Am I transparent and ethical in all aspects of my research, including data collection, analysis, and reporting?</p>	<ul style="list-style-type: none"> • Research ethics guidelines and frameworks specific to your field of work. • Establish clear data management and record-keeping practices according to department standards. • Educate your team about research ethics and integrity principles through discussion and lead by example.
<p>They continuously develop themselves and promote learning and development in their area.</p>	<p>Continuous self-development and promoting learning and development for others:</p> <p>Do I invest time and effort in my own professional development on an ongoing basis?</p> <p>Am I an advocate for learning and development within my area or organisation, encouraging others to pursue opportunities for growth?</p>	<ul style="list-style-type: none"> • Take structured, online courses within your department and GSE resources for your professional development. • Create a personal development plan and set aside dedicated time for self-improvement. • Arrange set learning events for specific topics, inviting diverse speakers. • Visibly advocate for a culture of continuous learning within your team or organisation, where individuals are supported and recognised for pursuing relevant training and development opportunities.

Leadership value 3: Integrity

**Expected standards**

They lead by example and are visible and approachable in their department and the GSE profession.

Self-assessment questions**Leading by example and visibility:**

Do I lead by example in terms of ethical conduct, professionalism, and dedication?

Am I approachable and visible within my department and the broader professional community, making myself available for mentorship and collaboration?

Suggested actions: Tools, techniques and strategies to support development

- Establish communication and collaboration platforms for staying connected with team members and colleagues.
- Schedule regular check-ins with team members and different groups of employees to engage, advise and mentor.
- Be actively involved in the GSE profession, professional associations or networks related to your field, and promote collaboration and knowledge-sharing among peers.

Resources

[Vlog on GSE leadership value: Integrity](#) by Damitha Adhikari, Director for Science and Innovation for Climate and Energy (SICE). Department for Energy Security & Net Zero (DESNZ).

[Blog on GSE leadership value: Integrity](#) by Dr Kavitha Kishen, Deputy Director, Security, Resilience and Strategy. Government Office for Science.

7 Leadership value 4: Collaborative

Definition: A GSE leader is a collaborator and a great communicator who can explain complex information to a range of audiences, advocating for science and engineering.

Leadership value 4: Collaborative



Expected standards

They can communicate the big picture and strategic vision to their team and others, inspiring them by conveying the purpose and significance of their work.

Self-assessment questions

Communicating the big picture and strategic vision:

Can I effectively articulate the overarching vision and purpose of our work to my team and others?

Do I inspire and motivate others by helping them understand the significance and impact of what we do?

Am I able to convey complex ideas and strategic goals in a way that resonates with people and aligns them with our mission?

Suggested actions: Tools, techniques and strategies to support development

- Review and understand your organisation's mission and strategy document. Identify where your unit/team contributes to this.
- Develop a compelling narrative that connects the organisation's mission and goals to individual team members' roles and contributions.
- Create a visually engaging data presentation for greater impact and understanding.
- Use storytelling techniques to convey the purpose and significance of the work and engage in regular communication sessions to align with the strategic vision.
- Take Civil Service Learning courses on storytelling techniques based on your needs.

Leadership value 4: Collaborative

**Expected standards**

They can distil complex, technical information and clearly explain concepts, tailoring this appropriately to different audiences by understanding different perspectives.

Self-assessment questions**Distilling complex technical information:**

Am I skilled at simplifying complex technical information and explaining it clearly to individuals with varying levels of expertise?

Do I tailor my communication to different audiences, considering their perspectives and prior knowledge?

Can I provide real-world examples and analogies to make technical concepts more accessible?

Suggested actions: Tools, techniques and strategies to support development

- Take the GSE learning modules on [Communicating Science and Engineering Advice](#) and encourage your team to participate. Assess your audience's knowledge level and adapt your approach and style accordingly.
- Use visual aids, such as diagrams, [charts](#), and infographics, to simplify technical concepts.
- Seek out good practice and offer workshops or training sessions to enhance the communication skills of team members, helping them by breaking down complex information for different audiences.

Leadership value 4: Collaborative

**Expected standards**

They influence by inspiring trust.

Self-assessment questions**Influencing and inspiring trust:**

Do I consistently inspire trust and confidence among my team members and colleagues?

Am I perceived as a reliable and credible source of information and guidance?

Do I build strong working relationships based on trust and integrity?

Suggested actions: Tools, techniques and strategies to support development

- Lead by example in terms of reliability, consistency and transparency, and regularly seek feedback.
- Investigate relevant training, such as stakeholder management. Foster open and honest communication, encourage feedback, and acknowledge and address concerns to build and maintain trust.

Leadership value 4: Collaborative

**Expected standards**

They advocate for change and innovation using science, engineering and technology and are open to different approaches to embed innovation across government.

Self-assessment questions**Advocating for change and innovation:**

Am I proactive in advocating for the use of science, engineering and technology to drive innovation in government initiatives?

Do I welcome and encourage different approaches and ideas to promote innovation?

Do I actively participate in and support efforts to embed innovation in government processes and decision-making?

Suggested actions: Tools, techniques and strategies to support development

- Read the [UK Science and Technology Framework 2023](#) about making the UK a science superpower by 2030.
- Engage in cross-functional activities and encourage team members to propose innovative solutions.
- Conduct brainstorming sessions and use relevant software for tracking and implementing ideas, where possible.
- Create an innovation culture by recognising and rewarding creative ideas, and collaborate across government and externally with academia and industry to share best practice and innovative approaches.

Resources

[Vlog on GSE leadership value: Collaborative](#) by Mary De Silva, Deputy Chief Scientific Adviser and Head of the S&E Profession in the Department of Health and Social Care (DHSC).

[Blog on GSE leadership value: Collaborative](#) by Rick Mumford, Head of SERD – Food Standards Agency.

8 Points of consideration

9.1 Personal checks and balances

We are all from diverse professional and personal backgrounds, and at different stages of our leadership journey, so it's important for you to understand your conscious and unconscious biases (personal frame of values) to better understand why we think and act in certain ways. By understanding yourself better you can transform your leadership style and achieve future goals.

Maintaining a personal system of checks and balances will be helpful in embedding our leadership values of inclusive, decisive, integrity, and collaboration. Regular self-assessment will allow you to reflect on your actions, ensuring that your decisions and interactions align with our values.



9.2 GSE leadership values are intrinsically interlinked

Though these are four distinct values which require different skills to master, they are all interlinked. It's important to understand that inclusivity nurtures a collaborative approach, which in turn enhances the quality of decisions made, all the while upholding the ethical standards embodied by the integrity value.

9.3 Conscious commitment

GSE members should have a conscious commitment to learning and developing a personal set of actions when applying the GSE leadership values for their own and their employees' development. This will develop your understanding of how, by living the values, you can create a culture of support and innovation and become an empowering leader in the science and engineering profession.

9 Contact information

Please visit the [GSE profession web page](#) for more information on the profession and our offer, including resources on talent and leadership, learning and development, diversity and inclusion, communications, interchange, and science and engineering fast stream.

Please sign-up to [become a member of the GSE profession](#) to connect with other members and receive regular information and updates on existing resources.

Please do get in touch at: gse@go-science.gov.uk for any questions or thoughts you may want to share.



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