

# JUDGING CRITERIA FOR INNOVATION CATEGORIES: DESIGN & CONSTRUCTION, EDUCATION, ENERGY & ENVIRONMENT, FOOD & RETAIL, HEALTH, SAFETY & SECURITY, FUTURE OF TRANSPORT, WEARABLE TECHNOLOGY

Originality of idea (Score 1-15)	Does the idea or project show creative thinking? Does it stand out from the crowd? Is the idea unique and original? Are there similar solutions for this market? Perhaps the innovation is an alternative to existing solutions or an evolution of an existing solution?
Quality of your research methods and presentation (Score 1-15)	We want the students to do this in their own way, but we have put together some helpful guidelines to make their approach to research more effective.
Clarity of idea (Score 1-10)	Is the project or idea clearly described? Is the purpose clear? How does the work demonstrate that the team has thoroughly understood the area where they have chosen to work?
Understanding of potential market (Score 1-10)	Have they clearly identified the market for their idea? Is it a mass or niche market? Who would use it? Who will benefit? What steps did they take to understand people's needs and the way the innovation could make a difference? Are there any competitive alternatives to their approach? Have they explained why their approach is needed?
Use of industry experts (Score 1-10)	How did they make use of expert help from industry or academia? Who did they contact and what did they ask them to do? How did they use their advice to improve, develop or change their idea? Do they have plans to continue the relationship with the partners?
Use of data (Score 1-10)	How well have they used data to inspire or support their work?
Skill and thoroughness (Score 1-10)	How well is the project or idea executed? How much effort has been made to develop the idea? The technical quality of the execution of the idea or project.
Is it doable? (Score 1-10)	How practical is it to take this innovation to the next level?  Are there major technology or market dependencies that currently prevent this innovation being developed into a prototype or achieving production status? Have students identified these?
What did the team learn from their experience? Score 1-10)	Has it changed their thinking in any way? Have they learnt more about a particular area of Science, Technology, Engineering or Maths? Have they been inspired? What have they learned about working in teams? And/or collaborating with other teams?

#### JUDGING CRITERIA FOR THE BEST INNOVATION CATEGORY:

BEST INNOVATION	
Originality of idea (Score 1-15)	Does the idea or project show creative thinking? Does it stand out from the crowd? Is the idea unique and original or does it provide an innovative alternative to existing solutions or an evolution of an existing solution? Does it provide an innovative solution to a problem?
Quality of planning and project management (Score 1-15)	Have the students clearly evidenced the way they have planned and managed the entire project?
Clarity of idea (Score 1-10)	Is the project or idea clearly described? Is the purpose of the product clear? How does the work demonstrate that the team has thoroughly understood the area where they have chosen to work?
Quality of Design (Score 1-10)	When making choice of materials, mechanical systems and/or software solutions have the students considered their suitability/appropriateness?
Understanding of potential market (Score 1-10)	Have the students clearly identified the market their product would be used? Have they understood the customer requirement and identified the business needs? Have they illustrated the difference their innovation could make? Have they identified competing alternatives and explained what approaches are needed?
Use of industry experts (Score 1-10)	How did they make use of expert help from industry or academia? Who did they contact and what did they ask them to do? How did they use their advice to improve, develop or change their idea? Do they have plans to continue the relationship with the partners?
Use of data (Score 1-10)	How well have they used data to inspire or support their work?
Skill and thoroughness (Score 1-10)	How well is the project or idea executed? How much effort has been made to develop the idea? The technical quality of the execution of the idea or project.
What did the team learn from their experience? (Score 1-10)	Has it changed their thinking in any way? Have they learnt more about a particular area of Science, Technology, Engineering or Maths? Have they been inspired? What have they learned about working in teams? And/or collaborating with other teams? w

#### PUBLISHED CRITERIA FOR THE BEST RESEARCH CATEGORY:

BEST RESEARCH CATEGORY	
Quality of research skills and methodology (Score 1-15)	How thoroughly has the research been conducted? Have the team evidenced their research methodology? How have they credited sources?
Clarity of research and presentation (Score 1-15)	Is the project or idea clearly described? Is the purpose clear? How does the work demonstrate that the team has thoroughly understood the area where they have chosen to work?
Originality of idea (Score 1-15)	Does the idea or project show creative thinking? Does it stand out from the crowd? Is the focus of their research unique or original? Perhaps the research area builds on existing knowledge and suggests new pathways
Planning and project management (Score 1-10)	How well have the team planned and managed the whole process?
Understanding of potential market (Score 1-10)	Has the team clearly identified the market for their idea? Have they shown the ability to identify a need to understand a customer requirement and their business needs? Is it a mass or niche market? Who would use it? Who will benefit? What steps did they take to understand people's needs and the way the innovation could make a difference? Are there any competitive alternatives to their approach? Have they explained why their approach is needed?
Use of industry experts (Score 1-10)	How did they make use of expert help from industry or academia? Who did they contact and what did they ask them to do? How did they use their advice to improve, develop or change their idea? Do they have plans to continue the relationship with the partners?
Understanding of engineering, scientific, technological principles (Score 1-10)	How well does the project demonstrate a sound knowledge of STEM?
Use of data (Score 1-5)	How well have you used data to support and/or inspire your project?
Evaluation of the project and next steps (Score 1-10)	What did the team learn from their experience? What might they have done differently based on their experience? How do they think it could be taken further? Has it changed their thinking in any way? Have they learnt more about a particular area of Science, Technology, Engineering or Maths? Have they been inspired?

### JUDGING CRITERIA FOR SKILLS CATEGORY – BEST USE OF AI:

BEST USE OF AI	
How well has AI been used in this project? (Score 1-25)	How effectively has AI been integrated in the project? Has the student made appropriate use of AI and clearly indicated where it has been used in their work.
Willingness to learn and develop their understanding of AI and its best uses during the course of the project to enhance their work (Score 1-15)	What new skills did they learn? Has the use of AI enhanced their project? Have they used critical thinking to assess the value of the results and perhaps then reworked the text/image? If they have enlisted help of other people, have they evidenced this?
Evidence of any intention to further develop their knowledge of AI and how it can be ethically used as a result of participating in the TeenTech Awards (Score 1-15)	What evidence have they provided on learnings during the project journey? Have they considered any ethical implications of the AI they are presenting within the project? Have they gained skills that they can take forward?
Analysis and insight (Score 1-15)	What tools have they used? What skills have they learnt and have they evidenced this?
Presentation of results (Score 1-15)	How well is the presentation structured? Have they laid out their points in a clear and coherent way? Have they used visual aids effectively?
Planning and project management (Score 1-15)	How well was the project planned and have they managed the whole process of explaining, laying out and documenting their project.

### JUDGING CRITERIA FOR SKILLS CATEGORY – CREATIVE AND DIGITAL MEDIA

CREATIVE AND DIGITAL MEDIA	
Originality of idea (Score 1-15)	Does the idea show creative thinking? Does it stand out from the crowd? Is the idea unique and original? Have they shown where their inspiration came from?
Choice of Media (Score 1-15)	Was the choice of medium to showcase their idea i.e. animation/game/short film the most appropriate for their capabilities? Have they demonstrated why this was the best medium?
Use of digital tools (Score 1-15)	Have the students demonstrated a clear use of digital tools?
Understanding of potential market (Score 1-5)	Have they identified who their audience would be? Who would use it? Who would benefit the most? What steps did they take to understand people's needs and the way their piece of work would make the difference? Were they aware of any competitors within the subject field?
Use of industry experts (Score 1-5)	How did they make use of expert help from industry? Who did they contact and what did they ask them to do? How did they use their advice to improve, develop or change their idea? Do they have plans to continue the relationship with the partners?
Skill and thoroughness (Score 1-10)	How well is the idea executed? How much effort has been made to develop the idea? The technical quality of the execution of the idea or project.
Planning and project management (Score 1-5)	How well have they planned the project and managed the creative process, particularly in relation to use of digital tools/skills? If working in a team did they make the best choices when assigning roles?
What did the team learn from their experience? (Score 1-10)	Has it changed their thinking in any way? Have they learnt more about a particular area of creativity? Has it inspired them to look at other opportunities within this field?

### JUDGING CRITERIA FOR SKILLS CATEGORY – DIGITAL AND DATA SKILLS

DIGITAL & DATA SKILLS	
Quality of digital and/or data skills used in the project (Score 1-25)	Are digital and/or data skills a key part of the project? Have they clearly shown evidence of these skills and how they have used them?
Willingness to learn and develop their digital and/or data skills during the course of the project to enhance their work (Score 1-15)	What new digital and/or data skills did they learn? Did they do this by themselves or did they enlist the help of other people? If so, has this been evidenced?
Evidence of any intention to further develop their digital and/or data skills as a result of participating in the TeenTech Awards (Score 1-15)	What evidence have they provided on learnings during the project journey? Have they gained skills that they can take forward?
Analysis and insight (Score 1-15)	What tools have they used? What digital and/or data skills have they learnt and have they evidenced this? Have they extracted relevant insights from their work to answer their problem statement?
Presentation of results (Score 1-15)	How well is the presentation structured? Have they laid out their points in a clear and coherent way? Have they used visual aids effectively? Have they answered all of their questions?
Planning and project management (Score 1-15)	How well was the project planned and have they managed the whole process of explaining, laying out and documenting their project, particularly in relation to use of digital and/or data skills

### JUDGING CRITERIA FOR GLOBAL CHALLENGE 2024 – PATIENT SAFETY

In this category students have been invited to take one of the following 2 approaches.

- 1. BIG IDEA tackling a specific problem area and develop an idea to make a difference.
- 2. TRANSFORMATIONAL a complete redesign of the healthcare system

The criteria for each of the 2 approaches are as follows:

#### **BIG IDEA**

BIG IDEA	
Describing the Problem (Score 1-15)	Have the students provided a clear explanation of the problem being addressed, why it is needed and the goals of the idea?
Innovation (Score 1-25)	Have the students clearly addressed the problem and existing solutions? Have they thought innovatively and made a compelling case that this will make an improvement to patient safety?
Impact (Score 1-15)	Have the students considered how stakeholders could benefit from their idea? Have they discussed and evidenced this in their work?
Viability (Score 1-15)	Have the students demonstrated an understanding of costs, risks and timeframes? Have they clearly shown the development and progress of their idea and any successes?
Expert Advice (Score 1-10)	Have the students made good use of mentor expertise or industry experts? Have they used this advice to improve and develop their idea?
Planning and project management (Score 1-10)	How well have the students planned the project and managed the process? If they have worked in a team, did they make the best choices when assigning roles within the team?
Presentation (Score 1-10)	Is the presentation structured? Have they made their points in a clear and coherent way? Does their approach, findings and concluding arguments make logical sense? Have they used visual aids effectively? Have they answered any questions satisfactorily?

## JUDGING CRITERIA FOR GLOBAL CHALLENGE 2024 – PATIENT SAFETY

#### **TRANSFORMATIONAL**

TRANSFORMATIONAL	
Originality of Idea (Score 1-20)	Is the idea original? Does it show a unique approach to transformation? Will it stand out from the crowd?
Workforce (Score 1-20)	Have the students considered the role of the workforce in their transformative approach to delivering safe healthcare? Have they clearly described this?
Clarity of Idea (Score 1-15)	Is the idea clearly explained? Could it provide a window into the future where healthcare is safe? Have the students organized their work logically?
Resource (Score 1-15)	Have the students considered how this transformative approach would be financed and resourced? Have they considered the technology needed? How could it be built?
Expert Advice (Score 1-10)	Have the students made good use of mentor expertise or industry experts? Have they used this advice to improve and develop their idea?
Planning and project management (Score 1-10)	How well have the students planned the project and managed the process? If they have worked in a team, did they make the best choices when assigning roles within the team?
Presentation (Score 1-10)	Is the presentation structured? Have they made their points in a clear and coherent way? Does their approach, findings and concluding arguments make logical sense? Have they used visual aids effectively? Have they answered any questions satisfactorily?