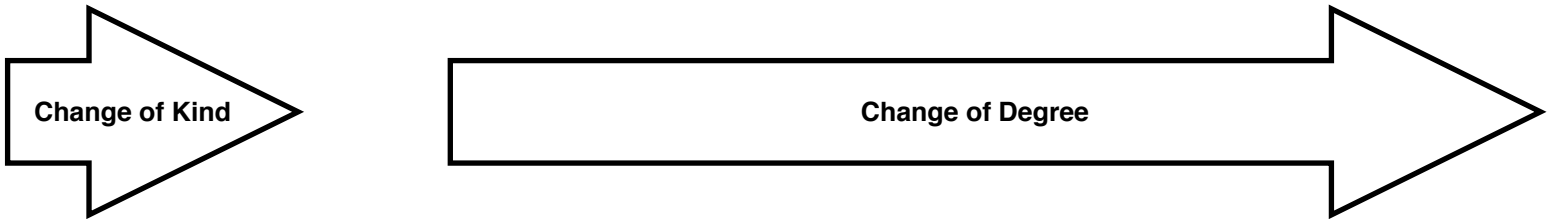


Showcase Independent Assessment Tool

Constraints

- 1. The collection of materials at your Showcase station **must** include at a minimum:
  - a. A large-format printed poster
  - b. A one-pager
  - c. Engineering prototype(s)
- 2. The structured presentation **should** last for close to 15 minutes
- 3. The structured presentation **must not** last for more than 20 minutes



Criteria

Attributes related to Actions	Unacceptable	Satisfactory	Good	Outstanding	You want your assessors thinking ...
	Omitted; neglected; ignored; unintentional	Done “by the book”; done “as expected”; done “as prescribed”;	Researched; triangulated; explored; reflected; integrated; questioned; judged; intended	Adapted; augmented; extended; synthesized; incorporated values	
Attributes related to Outcomes	Superficial; incomplete; incorrect; arbitrary; cursory; unjustified; unsubstantiated	Thorough; substantiated; (expectedly) naïve; (predominantly) correct; (occasionally) awkward; consistent	Comprehensive; argued; professional; deliberate; coherent; balanced	Nuanced; distinctive	
Showcase	You created an integrated Showcase experience that leveraged your human and non-human assets to generate a positive impression				
The quality of teamwork demonstrated at the Showcase	Team displays evidence of inequitable contribution; one member dominates or at least one member is excluded; team members talk over each other, silence each other or contradict each other				You were a mutually-supporting, integrated team
Integration among the representations (including the oral presentation) to create a compelling argument in favour of your design concept and activities					You assembled and interacted with a comprehensive package of materials that produced a compelling argument for your design product(s) and process(es)
Framing					
The appropriateness and quality of, and justification for, the final framing of the opportunity • stakeholders   • requirements	Premise of opportunity, your key community, and key design requirements not discussed, or discussed incorrectly Reframing/scoping (or decision not to reframe or rescope) not justified	Premise of opportunity, your key community, and key design requirements discussed in line with the RFP Reframing/scoping (or decision not to reframe or rescope) discussed, but justification may be tenuous	Discussion of your key community, the premise of the opportunity, and key design requirements (expands on, pushes back on, reprioritizes select aspects of) the RFP and its framing, based on your additional research and exploration (e.g. from the literature, stakeholder discussions, etc)		You have improved the RFP so that it enables you to do a better job without sacrificing its original vision
Design Concept	You have developed a design concept (which could be the “do nothing” or “don’t do this” option) and have credibly assessed its potential to resolve the opportunity you have framed				
The quality of the verification of the recommended design concept • requirements   • protocol(s)	No evidence of (prototype testing, calculations, engineering modelling) Verification data collected but use of or consideration of results demonstrates lack of thought and due diligence. Verification protocol does not address a metric that you can link back to the opportunity and its stakeholders Strengths and limitations of test protocol not discussed	Verification data collected but justification for protocol or use of data may be awkward. Verification protocol addresses a metric that may not be the most important, but can still be argued as relevant to the opportunity and its stakeholders Basic strengths and limitations of test protocol discussed, though discussion may be imbalanced or superficial	Verification data used appropriately to guide (or not guide) design, based on your (thorough) discussion of the strengths and limitations of your test protocol and prototype. Both the protocol itself and the metric(s) that it addresses are well-justified with research, logic, or other strong evidence	As per "Good" + Verification data demonstrate that your prototype should credibly address the opportunity  Protocol credibly augments 'standard' or more commonly-used procedures with your own modifications based on your context and prototype	You have done a great job of assessing your design concept against the requirements set out for it
The quality of the validation of the recommended design concept • protocol(s)   • engagement	No evidence of stakeholder interaction or stakeholder feedback Stakeholder feedback collected but not critically considered in your design process (e.g. negative feedback is unjustifiably dismissed; positive feedback is not evaluated)	Stakeholder feedback collected and considered in your design process, though incorporation of feedback may be awkward or not supported by research or other key design considerations	Stakeholder feedback is integrated with other research, and considered with your key design requirements, in any design changes or recommendations that follow from this feedback	As per "Good" + Validation data demonstrate that your concept is likely to be accepted by the community  Feedback from multiple, relevant stakeholders are considered and incorporated into your design process	You have checked that your design doesn't just work “in theory” but have worked with your stakeholders to check how well it will work “in practice”
Design Process and Tools	You approached this activity like student engineering designers, not high school hackers. Systems 1 and 2 were in balance!				
Correctness in using engineering design tools and coverage of those tools over { framing, diverging, converging, and representing }	No or little evidence of formal design tool use. Tools are used improperly. Input to the tools is largely unsubstantiated. Tool use is limited to a subset of design activities.				When you used a “formal” engineering tool (including ones that you modified to be more useful) you did so correctly
Appropriate use of engineering design tools (e.g. to guide activities; generate or communicate information; etc.)	Tools were used for no explicable reason or “because we were told to”. Tool use had little or no relevance to the design issues or activities being addressed or undertaken.				
Representations	Your representations were themselves well-designed (e.g. with objectives and taking into account the nature of the medium) and well-executed				
The quality of the poster as an independent representation	Poster reading path is not intuitive or clear Poster messaging is unclear due to over-use of text and/or unclear images	Poster reading path is intuitive Poster shows an appropriate balance between images and text to make the core content clear to a viewer Poster integrates some principles of communication (e.g. bullet lists, headings, formatting), though use may not be effective for emphasizing core messages	As per "Satisfactory" + Poster leverages principles of good communication (i.e. pristine, purposeful images; appropriate use of bullet and numbered lists; formatting; colour) to emphasize core messaging	As per "Good" + Poster shows visual design decisions that enhance clarity of content and encapsulate a memorable message for the viewer	You designed and produced a really good poster that took advantage of the strengths and limitations of the medium
The quality of the prototype(s) as engineering models with the purpose(s) of communicating {and,or} generating information	Prototypes have no defined purpose, or all focused on "communication".	Prototypes offer a simple understanding of one or two key aspects of the design concept, and have a purpose in decision-making or refining the concept	Multiple prototypes are used to guide or inform multiple design decisions;	As per "Good" + Prototypes serve purposes that are mutually reinforcing to provide confidence in design decisions	You designed and created prototypes that supported your design activities by generating and communicating useful information
The quality of the structure and delivery of the oral presentation	Oral presentation shows poor preparation, lack of understanding of key aspects of the design concept, and/or one member of the team {dominates, offers little or nothing} in the presentation and Q&A; Q&A answers show lack of understanding, lack of rigour, or poor team dynamics	The presentation provides a consistent understanding of the design concept and some justification for key design decisions; some important aspects get explained; The presentation makes use of at least one of the resources to complement oral delivery (e.g. prototype, poster, slides, research evidence); Q&A is handled adequately, though answers to questions may be somewhat simplistic	As per "Satisfactory" + The presentation enhances an audience's appreciation for how design decisions contributed to the overall design; presentation explains the value of research and/or testing; presentation uses resources to enhance the audience's understanding and show integration; presentation demonstrates professional interaction among teammates	As per "Good" + The team capitalizes on the unique potential of different modes of representation to support the oral presentation and provide a nuanced and memorable understanding of the design concept; The team demonstrates cohesion and mutual support (e.g. through hand-offs, capitalizing on complementary skill sets)	You designed and delivered a really good oral presentation that took advantage of the strengths and limitations of the medium
The quality of the one-pager as an independent representation	One-pager does not provide a high-level explanation of the design concept (e.g. it gets bogged down in details); it is not accessible to a non-Praxis reader; its organization or language makes it difficult to understand either at a structural level or a sentence level.	One-pager provides a high-level explanation of the design concept; it offers sufficient information to a non-Praxis reader; its organization and language are understandable; it may be overly dependent on text or on images; a reader can take away the one-pager and have a reference to understand the concept	The high-level explanation of the design concept allows a reader to quickly grasp the key to the concept; the explanation provides a deepened understanding of the design concept; it shows appropriate selection and balance of text and image; the writing makes use of principles of good organization (e.g. formatting, headings, bullet lists, etc.); a reader taking away the one-pager will have a memorable and clear understanding of the concept	As per "Good" + The layout and visual elements enhance the reader's comprehension of the concept; the writing demonstrates professional polish through word choice, clear writing, headings, etc.; a reader who misses showcase can use the one-pager to gain a clear understanding of the design concept	You designed and produced a really good one-pager that took advantage of the strengths and limitations of the medium