

INDUSTRY ASSOCIATES PROGRAM R&D ASSOCIATES PROGRID® EVALUATION TOOL

>r&D Associates Evaluation Matrix™

Alberta Ingenuity uses an evaluation tool, ProGrid®, in the review of the Industry Associates applications. ProGrid® is an evaluation-modeling methodology that helps the reviewers optimize the evaluation of applications in a consistent manner and enables an appropriate discrimination between 'outstanding', 'excellent', 'very good' and 'good' applications.

The Industry Associates' Values, Priorities and Expectations are assembled in a matrix of performance criteria and, specifically, in a set of calibrated performance levels, called Language Ladders™, established for each criterion. The ProGrid® Evaluation Matrix is shown below:

	A The Initiative	B The Candidate	C The Benefits
1	The Project	Letters of Reference	Company Growth
2	Project Plan	Academic Record	Candidate Growth
3	r&D Facilities	Career Track Record	
4	Training Environment	Candidate Suitability	
5	Commercialization Strategy		

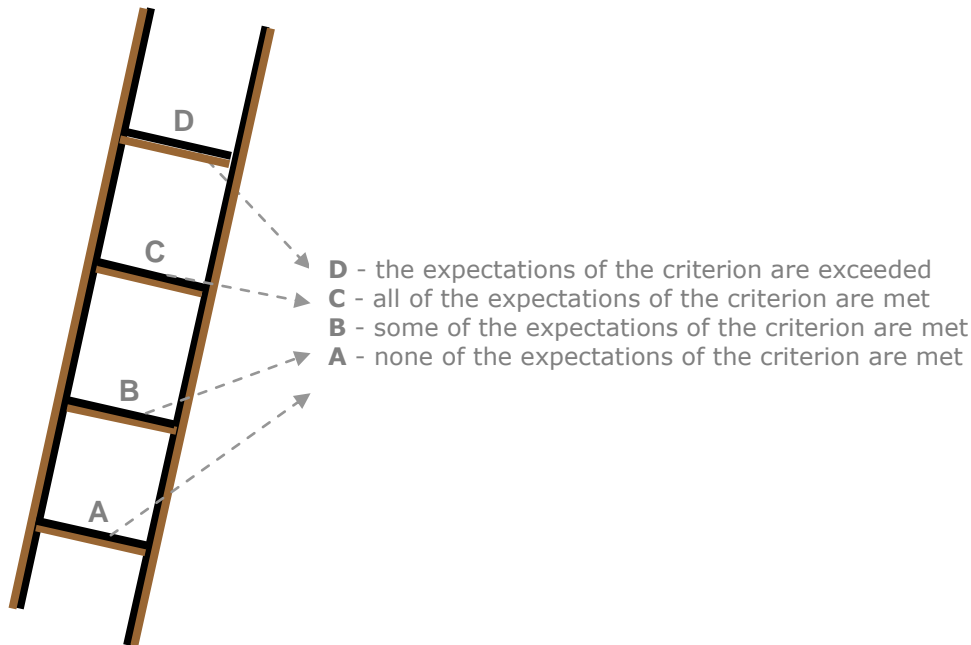
Reviewers are asked to select their ratings for each criterion based on the information provided on the application. These ratings are selected through the identification of one of the four Language Ladder™ statement sets (A to D) that most accurately reflect specific information in the application.

The Reviewers' assessments are input into the ProGrid® software for analysis. The software provides an automatic output record, in both chart and text form, containing the following information:

- The grid position of the application with respect to the Evaluation Matrix;
- A profile of strengths and weaknesses;
- Specific comments by the Reviewers regarding individual criterion or the application as a whole;
- A comparison of the various ratings of each application with the average rating for each performance criterion in the overall competition; and
- A customized evaluation report to provide feedback on the application.

The Language Ladder™

The term “Language Ladder™” is a good visual representation of the metrics used to evaluate intangibles in the ProGrid® Process. The ladder has four steps starting with A at the first rung and progressing upward to D at the top. Short statements with key words are used to express the intent of each step in this ladder - a generic set of statements that indicates the intent of each statement is shown beside the ladder below. The words used to describe the rungs in the ladder should represent meaningful separations between rungs on the ladder and be understandable by the evaluators. The statements are constructed to fit the criteria at hand. It is frequently asked why the ladder starts at A and ends at D - the reverse of the terminology used in academia for grading purposes. Starting a journey at A is a logical starting point, and permits the journey to be extended beyond D. Extending the reach of the ladder beyond D has been found to be a useful concept in some application, e.g. personnel evaluations involving promotions.



Strong applications typically meet Ingenuity’s excellence expectations as defined by the ‘C’ statements. Outstanding applications will have exceeded the expectations as defined by the ‘D’ statements. Very good to good applications either meets some or does not meet the expectations as defined by ‘B’ and ‘A’ statements. The following describes the statement sets.

A. The Initiative

A1 The Project

- A** The project description is *limited* in its explanation and/or the project does not appear to be well thought out.
- B** The project *will likely add* to the existing knowledge in this area of technology. There is evidence of a *good understanding* of the technical concepts for the project.
- C** The project has the *potential to significantly advance* knowledge and innovation of an existing technology or to develop a new technology. The proposal is well written and *clearly explains* the technical concepts involved.
- D** The project *will significantly advance* knowledge & innovation and will lead to new or significantly enhanced products and/or processes. The rationale for the project is *logical and clearly* presented.

A2 Project Plan

- A The project plan is *limited* and does not appear to be well thought out. The plan includes *vague objectives and goals*.
- B The project plan *includes* goals, milestones, timelines and methodologies. The *feasibility* of completing the project on schedule and on target is *not demonstrated*.
- C The project plan is *concise* with *appropriate* objectives, goals, milestones and timelines. The plan *demonstrates the feasibility* of completing the project *on schedule and on target*.
- D The project plan is *clear and concise* with *well-defined, justifiable* objectives as well as *detailed realistic* goals, milestones and timelines. The plan includes *innovative methodologies* and demonstrates that the project will be *completed on schedule and on target*.

A3 R&D Facilities (lab equipment, computers, supplies, etc.)

- A The company still *needs to acquire*, or arrange for, the missing technical capabilities required to successfully complete the project.
- B The company has access to *adequate* r&D facilities for the project (in-house or external).
- C The company has *dedicated* r&D facilities - either in-house or through contractual or collaborative agreement with external facilities - for the project. Access for the candidate is *being arranged*.
- D The company has *committed dedicated* r&D facilities - either in-house or through contractual or collaborative agreement with external facilities - for the project. Access to the resources for the candidate *has been arranged*.

A4 Training Environment

- A Candidate will receive an *adequate* level of training. It is *unclear what role* the supervisor and/or other personnel will have with the candidate and in the project.
- B Candidate is entering a *good* training environment. The supervisor and/or other technical personnel *have capabilities* in the project technology. The candidate will have a *good opportunity* to interact with the supervisor and other technical personnel.
- C Candidate will be working in an *excellent* training environment. The supervisor and/or project team have either the *necessary* technical capabilities, or have collaborators with strong technical capabilities for the project. The candidate will have *mentoring and coaching* interaction with the supervisor, collaborators and other highly skilled personnel.
- D Candidate is entering a *superior* training environment. The supervisor and=project team have *exceptional* technical capabilities for the project. The candidate will have *outstanding mentoring and coaching* interactions with the supervisor and a network of other leading edge technology practitioners.

A5 Commercialization Strategy

The commercialization strategy should contain a description of the scope and scale of market and customer needs for the product, process or service being developed in the project. The strategy identifies the commercialization risks, including the identification and assessment of potential partners, customers and competitors.

- A Only limited consideration has been given to a prospective commercialization strategy for the products, processes or services.
- B A preliminary commercialization plan for the product, process or service coming from the project has been developed.
- C A commercialization strategy is clearly defined and clearly describes how the product process or service coming from the product will be commercialized with potential users identified.
- D The commercialization strategy for the product, process or service coming from the project is excellent and has been developed in collaboration with identified potential users of the product, process or service.

B. The Candidate

B1 Letters of Reference/Support

The referees must be independent and free from any relationship with the application submitted

- A Letters provide *brief/minimal information* about the candidate's personal characteristics, academic strengths, or research abilities.
- B Letters provide *credible support* about the candidate's research strengths/capabilities and personal characteristics. However, the information provided tends to be *general* rather than specific.
- C Letters are *predominantly* positive and provide *specific examples* of the candidate's potential research strengths/capabilities and personal characteristics (motivation, intellectual capacity, maturity, etc.).
- D Letters are *unanimously* glowing and highly supportive of the candidate, and provide *detailed assessments* of the candidate's recognized or potential research strengths/capabilities and personal characteristics (motivation, intellectual capacity, maturity, etc.).

B2 Academic Record

Only the graduate level academic record is considered, even though some universities also include undergraduate grades in the transcripts

The Candidate's academic record is:

- A ... *mostly average* during the candidate's graduate training period; and/or candidate has shown *steady improvement* over the course of training.
- B ... *consistently above-average* during the candidate's graduate training period; and/or candidate has demonstrated *significant improvement* over the course of training. Evidence of *above average* performance may include a few prizes/awards.
- C ... *excellent* during the candidate's graduate training period. Evidence of *excellence* may include the receipt of competitive prizes/awards.
- D ... *outstanding* throughout candidate's graduate training period. Further evidence of *exceptional academic achievement* may include highly competitive prizes/awards.

B3 Career Track Record

The evaluation is made within norms for the particular field and the stage and context of the candidate's career.

The candidate has:

- A ... *appropriate* research skills and experience as highlighted by the candidate's participation in presentations, preparation of abstracts or a modest level of publication.
- B ... *a solid foundation* of research skills as evidenced by some research and/or work experience or the publication of full-length papers, abstracts and presentations, appropriate for his/her stage of training.
- C ... *an excellent* track record for his/her stage of training, and research and/or work experience. The candidate has valuable applied r&D experience and/or has published in quality journals and/or has presented the results to a variety of audiences.
- D .. *an outstanding* track record of publications for his/her stage of training, and research and/or work experience. The candidate's research aptitudes and experience are clearly demonstrated by valuable applied r&D experience and in publications, conference presentations.

B4 Candidate Suitability

- A The candidate has the *necessary* technical background for the proposed project.
- B The candidate has *shown* that s/he has the *required* technical skills and knowledge to have an impact on the proposed project.
- C The candidate has *demonstrated* that s/he has the *required* technical and interpersonal skills and knowledge to have a *significant* impact on the proposed project ...
- D ... **AND** has shown that s/he has a *track record* of success in this line of investigation.

C. The Benefits

C1 Company Growth

The project's technology will add to the company's market share and leadership position in the industrial sector domestically or internationally.

Over the next two to five years, the project has the potential to:

- A** ... assist the company in *fine-tuning* or improving an existing product, process or service.
- B** ... contribute to the company *significantly enhancing* a product, process or service that will lead to an *increase in market potential* and an *increase in sales*.
... *develop a new and/or significantly enhance* an existing product, process or service that will allow the company to establish a *strong market presence*, put them in a *highly competitive position* and *significantly increase sales*.
- C** ... *develop a new and/or significantly enhance* an existing product, process or service *line* that will allow the company to *dominate* in a *competitive market* with *significant sales volumes*.

C2 Candidate Growth

- A** The candidate will have *limited networking and collaboration* opportunities.
The candidate will have the opportunity to *gain experience* from working on the applied research project. *Some opportunities* exist for networking and collaborations through technical and/or business meetings.
- B** The candidate will develop *valuable experience* in the company's research environment. A *high potential* exists for the candidate to develop *critical skills* to interact effectively with applied r&D and business personnel.
The candidate will gain the multidisciplinary experience required to assume a technical leadership role in the company. By applying the expertise gained through the project, the candidate will have the potential impact other companies and/or to sustain or expand the culture of innovation within the company and the ability to transfer technical leadership to other Albertan companies, where applicable.
- C**
- D**