

Industry Advisory Board Assessment and Evaluation

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Abstract

Virtually all academic programs in any given discipline have an Industry Advisory Board (IAB) whose purpose is to add value to the academic program. It must be noted that the term “IAB” is generic in nature and refers to any Industry Advisory Board, Committee, Council, or otherwise named advisory group. An IAB exists to advise, assist, support, and advocate for their associated academic program and the constituents of that program.

Similar to what accreditation requires of an academic program, an IAB must periodically assess and evaluate their performance, which can lead to corrective actions and have a profound impact upon an IAB and the academic program. The contents of this paper describe two methods that an IAB can use for assessment and evaluation, namely IAB Self-Assessment and IAB Benchmarking.

The Purpose of IAB Assessment and Evaluation

Ensuring organizational accountability is a key role for any IAB.⁶ Through periodic performance assessments and evaluations an IAB can identify ways to enhance IAB operations and services to the academic program. Within the context of this paper, assessment is defined as one or more processes that identify, collect, and format data for analysis, while evaluation is defined as one or more processes for analyzing interpreting the assessment data.^{4,5}

IAB assessment and evaluation serves many purposes, some internal to the IAB and some in relation to the academic program. A systematic assessment and evaluation process can:

- Give individual IAB members an opportunity to reflect on their individual and collective responsibilities.
- Identify different perceptions and opinions among IAB members.
- Point to questions that need attention.
- Serve as a springboard for IAB improvements.
- Increase the level of IAB teamwork.
- Provide an opportunity for clarifying mutual IAB expectations.
- Provide accountability.
- Provide credibility with the academic program, potential funding agencies, accreditation organizations, and other external audiences.

This is the author's manuscript of the article published in final edited form as:

McIntyre, C., Fox, P. (2017, February). Industry Advisory Board Assessment and Evaluation. In Proceedings of the 2017 American Society of Engineering Education Annual Conference.

IAB assessment and evaluation must be legitimate in the eyes of IAB members. The opinions of outsiders can be somewhat discounted, but what an IAB says about itself must be taken seriously. However, input from other sources (academic administrator or faculty) could also provide some insight.

The Timing of IAB Assessment and Evaluation

A full-scale assessment and evaluation may be desirable only once every two or three years with interim assessments conducted to monitor progress on the IAB work plan or action items. The time at which a full-scale assessment and evaluation may be particularly useful include:

- At the outset of a strategic planning process.
- In preparation of a major expansion of IAB programs or capital campaigns.
- When there is a sense of low energy, high turnover, or uncertainty about IAB member responsibilities.
- After an executive leadership change in the IAB or the academic program.

The Value of IAB Assessment and Evaluation

IAB Assessment and Evaluation, when properly conducted and with corrective actions, can have a profound impact upon an IAB. It can provide the impetus to move an IAB forward. It can also bring IAB members closer together and help break down barriers, establish camaraderie, and open-up dialogue. IAB assessment and evaluation may be the best method in which to reach the root of governance problems and find lasting solutions that will make for a more dynamic and effective IAB and thus better serve the academic program.

The Process of IAB Assessment and Evaluation

The overall process consists of a two-phase approach using both IAB Self-Assessment and IAB Benchmarking. Both are considered IAB Assessment and Evaluation methods and involves a number of steps, which include:

- Decide to conduct the assessment and evaluation. This must be a collective decision.
- Assign the responsibility for making the necessary arrangements to a small task force or to the IAB Executive Committee.
- Decide whether to use the standard instruments designed for IAB Assessment and Evaluation or design a process from scratch.
- Use the assessment tools to collect the data.
- Compile and document the responses in a report that is distributed to IAB members.
- Discuss and evaluate the assessment, perhaps in a closed session, and identify actions that will lead to improved IAB performance.
- Implement necessary corrective actions.

There exist a number of on-line assessment methods that were developed for non-profit organizations.^{2,11} However, most are designed as generic self-assessment questionnaires or surveys and are not specific to the actual needs of an IAB. IAB Self-Assessment and IAB

Benchmarking were developed specifically for an IAB and can be found in the appendices. Appendix A - IAB Self-Assessment provides a tool for determining the performance of an IAB from both an organizational and performance perspectives. Appendix B - IAB Benchmarking was developed to assess and evaluate IAB Outcomes also referred to as best practices.^{8,9} This process is updated periodically as additional IAB Outcomes are identified. Both of these processes are described in the following sections of this paper.

IAB Self-Assessment

IAB Self-Assessment (Appendix A) consists mostly of yes/no/not sure questions that provide individual feedback to the collective IAB. The IAB Self-Assessment could be completed individually or collectively at an IAB meeting. However, it is recommended that the IAB Self-Assessment be completed individually and anonymously. The risk of completing the assessment collectively at an IAB meeting is that the assessment of an individual member may be influenced by peer pressure or the impression of not being a team player.

An individual assessment could be completed using an electronic survey from unbiased parties, such as, the academic program administration and staff. The academic administrator or staff could send the survey as an attachment, collect the responses, and summarize the results (removing any identifiers) and send the results electronically to all IAB members. At a subsequent meeting, IAB members could evaluate the responses and set in place a plan of corrective action to address concerns and problem areas. Within the IAB Self-Assessment table there is a space provided for a “not sure” response. However, if an individual is “not sure” of a response to any assessment item, then this may be a “red flag” to that individual and to the collective membership of the IAB indicating misunderstanding or communication issues.

Once the assessments are discussed and evaluated by an IAB, corrective action must be taken to not only address shortcomings, but to identify the strengths of the IAB which leads to the determination of IAB Managerial Proficiency which is a key component of IAB Benchmarking, as described in the following section.

IAB Benchmarking^{1,3,8,9,12}

Within any given industry, benchmarking is a process that uses metrics to compare company performance to industry standards or best practices. Companies then improve their performance by tailoring and incorporating these standards or best practices into their own operations.

In a similar sense, the purpose of IAB Benchmarking is to determine the “comfort level” of an IAB once the baseline (initial benchmarking) of an IAB has been established. The “comfort level” is defined as the level at which an IAB is able to deliver their outcomes based on their managerial proficiency which is the fundamental principle of the IAB Growth Management Model.

IAB Growth Management Model (GMM)^{10,13}

The IAB GMM, as illustrated in Figure 1, is based on fundamental management and organizational theories. The basic hypotheses of the IAB GMM state that:

- IAB Outcomes are a function of IAB Managerial Proficiency.
- IAB Outcomes are defined as the number and quality of IAB best practices.
- Managerial Proficiency represents the IAB organizational structure, staffing, and planning systems.
- A significant increase in IAB Outcomes or quality of IAB Outcomes necessitates an increase in IAB Managerial Proficiency.

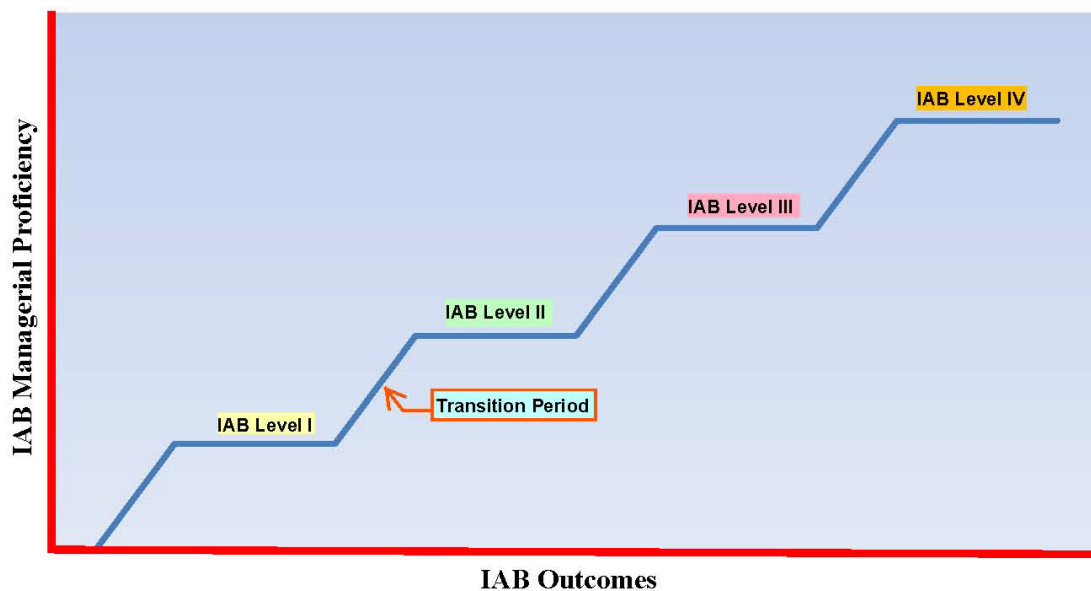


Figure 1 - IAB Growth Management Model

Within the model, the vertical axis represents IAB Managerial Proficiency. The horizontal axis relates to IAB Outcomes. The model is based upon the premise that the IAB Managerial Proficiency required is a function of the IAB Outcomes desired.

The IAB Managerial Proficiency vs. IAB Outcomes relationship is represented by a series of management plateau levels linked by transition periods. The four management plateaus (IAB Level I to IAB Level IV) are associated with the number and quality of IAB Outcomes that can be achieved at each level at the corresponding level of IAB Managerial Proficiency. These levels or plateaus are comfort or stability zones where the IAB Outcomes matches the IAB Managerial Proficiency.

Between each level are transition periods that occur when an IAB makes a conscious effort to move to a higher level which will necessitate an increase in IAB Managerial Proficiency. Transition periods occur when an IAB makes a conscious decision to increase or enhance IAB Outcomes which necessitates an increase in IAB Managerial Proficiency. This increase is the

result of an iterative process of learning through personal experience and the adoption of the next level of management systems practices. A transition period often causes anxiety and frustration for the individuals within the IAB and sometimes within the academic program, as in the case of senior faculty who were instrumental in establishing and initially leading the IAB. They may feel a sense of abandonment once the IAB reaches a level of maturity and self-autonomy. Transition periods can result in interpersonal conflicts because of new expectations and higher anticipated efficiencies. During the transition periods, IAB members are typically being asked to step out of their personal “comfort zones” and meet new challenges.

The IAB GMM provides the fundamental theory for understanding the magnitude and critical importance of effective IAB Managerial Proficiency which leads into the actual process of IAB Benchmarking, as presented in the following section.

The Process of IAB Benchmarking

In order for an IAB to determine an appropriate “comfort level” where IAB Managerial Proficiency matches IAB Outcomes, it is necessary to conduct IAB Benchmarking using the table provided in Appendix B. An electronic version of this table converted to an auto-sum Excel spreadsheet is available on the American Council for Construction Education (ACCE) website.¹ <http://www.acce-hq.org/industry/about-industry/>

The benchmarking process begins by identifying the specific outcomes conducted by an IAB. Note that sixty-three outcomes are listed in Appendix B, however, and IAB is free to add additional outcomes. A numerical measure of quality, i.e., “ranking,” for each identified outcome is entered into the table (or spreadsheet) using the following scale:

- 4 - Our IAB really excels at this best practice.
- 3 - Our IAB does pretty well for this best practice, but we could use some improvement.
- 2 - Our IAB does OK with this best practice, but we need to do a much better job.
- 1 - Our IAB pays lip service to this best practice and we need to vastly improve in this area.

The rankings are summed and a composite score is recorded which in the case of the initial benchmarking sets the baseline from which future IAB growth and development will be measured. All IABs are similar, but each IAB is unique which is why a direct comparison of composite scores is not appropriate. The IAB GMM provides the basic conceptual theory of benchmarking, but each level does not correspond to a mathematical composite score. An individual IAB can determine at which level it currently resides. It could happen that after the benchmarking process that an IAB finds itself in a transition period. At that point, a decision must be made to either: 1.) “retrench” and drop to a lower level where the current IAB Managerial Proficiency better matches current IAB Outcomes, or 2.) “go to the next level” and increase IAB Managerial Proficiency to match current or planned IAB Outcomes.

Similar to IAB Self-Assessment, IAB Benchmarking can be completed individually or collectively. For the benchmarking process, it is recommended that the process be completed collectively at an IAB meeting where rankings and opinions can be discussed in an open forum and a consensus on the rankings can be determined. Once the rankings for all outcomes have

been determined, an evaluation of the data must be completed. One of the advantages of a collective process is that much of the discussion concerning individual outcomes may already have occurred. The ultimate goal of this process is to set the baseline and then determine the best course of action. An IAB may wish to expand outcomes or improve on the quality of their current outcomes, or both.⁷ Regardless of the course of action, several key questions come to mind such as:

Are the planning systems for your IAB adequate to address the anticipated changes that are being considered? In other words, do the current policies and procedures, the strategic plan, and the plan of work need to be modified or updated to allow for the anticipated changes?

Are the quality systems for your IAB (assessment, evaluation, and corrective actions) adequate to address the anticipated changes? Benchmarking is an effective assessment and evaluation tool, but how does your IAB rank the quality of each outcome? Is it strictly opinion or are there metrics involved and what is the right balance?

Does the organizational structure of your IAB support the changes that are being considered? Are lines of responsibility and authority clearly defined and outlined in an organization chart?

Do your IAB have the personnel (membership) that can successfully accomplish the anticipated changes? If not, what needs to happen?

These are difficult questions and the corrective actions needed to address these issues are even more difficult. Once again, the primary purpose of the benchmarking process is to determine the “comfort level” of an IAB. If there is an expressed desire to increase IAB Outcomes, then the IAB Managerial Proficiency must increase in order to successfully implement any proposed changes to the services and programs offered by the IAB.

Summary

The overall process of IAB Assessment and Evaluation begins with IAB Self-Assessment which is a relative low impact activity in the sense of time and effort, but can provide tremendous insight into the working process of an IAB. This could lead to significant changes in the leadership, governance, performance, and outcomes of an IAB.

IAB Benchmarking is a more rigorous process which requires an IAB to clearly identify IAB Outcomes (what do we actually do?). A quality measure is then assigned to each outcome. A composite score of all the rankings established a baseline which is used to measure future improvements in performance and quality. Benchmarking also indicates if an IAB is at a certain level (comfort zone) or is in a transition period.

In order for an IAB to successfully accomplish its mission to advise, assist, support, and advocate for the academic program, periodic assessment and evaluation must be conducted in order to provide an IAB with the information and evidence which can assist in making data-based decisions which can greatly improve the overall performance of an IAB.

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Bibliographic Information

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Appendix A - IAB Self-Assessment

Assessment Item	Response		
The IAB held at least two meetings during the calendar or academic year	Yes	No	Not Sure
IAB members are notified of meetings in a timely manner.	Yes	No	Not Sure
The IAB agendas are prepared and distributed in advance of each meeting	Yes	No	Not Sure
The IAB delivered high-impact meetings	Yes	No	Not Sure
Percentage of IAB members who attended all meetings this year (from the IAB Secretary)	Percent		
The IAB meeting minutes are maintained as a permanent record and are distributed to the IAB members and appropriate administrators	Yes	No	Not Sure
The IAB elects officers on a regular systematic basis (yearly)	Yes	No	Not Sure
The IAB reports formally to the academic administrator	Yes	No	Not Sure
The IAB recruits “active” members	Yes	No	Not Sure
The IAB membership is diverse in gender and ethnicity, and is composed of individuals who represent a broad cross-section of the construction industry	Yes	No	Not Sure
IAB members are publicly recognized for their service	Yes	No	Not Sure
IAB members are aware of the IAB mission	Yes	No	Not Sure
The IAB utilizes up-to-date Bylaws to govern its operations	Yes	No	Not Sure
The IAB has an up-to-date Strategic Plan	Yes	No	Not Sure
The IAB develops and delivers an annual Plan of Work	Yes	No	Not Sure
The IAB uses Quality Systems to assess and evaluate <i>all</i> of their services and programs	Yes	No	Not Sure
The IAB takes corrective actions to address problems and deficiencies	Yes	No	Not Sure
IAB members are knowledgeable about accreditation standards	Yes	No	Not Sure
IAB members are familiar with the curriculum of the academic program	Yes	No	Not Sure
The IAB has reviewed the current academic program curriculum to determine if it is meeting the needs of the students and the employment needs of business and industry	Yes	No	Not Sure
The IAB reviews outcome data from the program, including: student competencies, placement rates, etc.	Yes	No	Not Sure
The IAB promotes and advocates for the academic program	Yes	No	Not Sure

Appendix B – IAB Benchmarking

IAB BENCHMARKING	
Rank the following best practices based on the scale below:	
4 = Our IAB really excels at this best practice.	
3 = Our IAB does pretty well for this best practice, but we could use some improvement.	
2 = Our IAB does OK with this best practice, but we need to do a much better job.	
1 = Our IAB pays lip service to this best practice and we need to vastly improve in this area.	
0 = This best practice is not an activity or service of our IAB (or just leave the Ranking blank).	
IAB Operating Procedures	Ranking
Operate under a written set of periodically reviewed and updated Bylaws	
Develop an IAB strategic plan, associated action plans, and IAB Plan of Work	
Organize and deliver regularly scheduled "high-impact" meetings with recorded minutes	
Recruit "active" IAB members	
Post activities on the website of the academic program (Bylaws, officers, activities, etc.)	
Attend an ACCE IAB Event	
Become a member of ACCE	
Participate in ACCE Visiting Team Training	
Participate as a member of ACCE Visiting Teams	
IAB Program and Curricula Involvement	Ranking
Review program goals and objectives (compare program accomplishments with program objectives)	
Recommend employability skills to be included in curriculum content (oral communication, writing, etc.)	
Serve on program curriculum review committees (review instructional materials for technical accuracy)	
Compare program content with actual job tasks and responsibilities	
Serve as class/course reviewers (review syllabus, observe class instruction, and provide an assessment & evaluation)	
Meet with graduating seniors to discuss the academic program	
Evaluate quantity and quality of graduates and job placements	
Active participation in the academic program's capstone course	
Serve as classroom guest lecturers	
Serve as adjunct faculty (course instructors)	
Provide skilled technicians to supplement instructor's experience	
Assist in obtaining instructional materials (suggest recommended equipment and supplies)	
Provide "real-world" projects (for use in courses)	
Provide in-service activities for course instructors concerning current business/industry methods and practices	
Provide opportunities for "site visits" and "field trips" to construction operations	
Provide equipment and facilities for specialized training needs	
Serve on the search committees for academic administrators and faculty	
Serve as a reviewer for the ACCE Self-Study (accreditation report)	
Meet with the ACCE Visiting Team (during the accreditation site visit)	
Support student organizations (AGC, ASC, NAHB, CMA, etc.)	
Serve as coaches and reviewers for student competition teams and events	
IAB Industry Awareness and Recognition	Ranking
Assist in recruiting potential instructors	
Assist in recruiting potential students	
Provide opportunities for student internships (and job shadowing)	
Sponsor or conduct leadership development seminars or workshops (for faculty and students)	
Assist in developing and delivering a marketing plan for the academic program	
Participate in career fairs and employment expositions	
Support and organize employer/student seminars and presentations	
Notify instructors of job openings for students	
Assist students in developing interview skills	
Assist in developing competitive skills events	
Sponsor or collect contributions of equipment and supplies for the skills events	
Judge competitive skills events	
Sponsor student organization activities	
Arrange for display space to promote student organizations and events at trade shows and place of employment	
Coordinate involvement with industry associations (ACE Mentor Program, AGC, NAHB, ABC, etc.)	
Meet regularly (i.e., lunch) with academic administrators (chair, dean, provost, and president)	
Communicate with legislators regarding academic program needs	
Promote tours for legislators	
Promote and support legislation for academic education and career advancement	
Sponsor awards (for outstanding students, faculty, and industry members)	
Establish events to recognize outstanding students, teachers, and community leaders	
Provide opportunities for faculty internships (at worksites)	
Employ graduates of the academic program	
Sponsor social events (for students and/or faculty)	
Create an IAB newsletter	
Promote coverage of the academic program in the media (newspaper, magazines radio, etc.)	
IAB Funding Mechanisms and Deliverables	Ranking
Establish an IAB dues structure, if possible (in some political jurisdictions this is not allowed)	
Create internal development programs (internal fund raising)	
Sponsor student/department activities (award luncheons, banquets, etc.)	
Sponsor student scholarships (non-endowed)	
Spearhead and support efforts to establish endowments (for scholarships and faculty positions)	
Support the research efforts of the academic program (financially and administratively)	
Obtain contributions to support select activities of the academic program	
TOTAL	0
Level I = 0-63; Level II = 64-126; Level III = 127-189; Level IV = 190-252	