

Welcome to the EAC Briefing for Institutional Representatives & Team Chairs

We will begin at 3:00 pm EDT (UTC-5)

*When we start, you may ask
questions using the Q&A*

*Thank you for your patience
as folks gather*



Welcome to the

EAC Briefing
for Institutional
Representatives
and Team Chairs

August 18, 2020
August 19, 2020



Welcome

- We are grateful that you have taken the time out of your busy schedule to join us and attend this session.
- We are here to assist you to have a successful review and a professional experience with your ABET review.

First ... A Bit of Housekeeping

We are Recording this Webinar

- ✓ The recording and the slides will be available on our public website.
- ✓ All Institutional Representatives will receive a follow-up email with the link to the recording and slides and instructions for their location on the ABET public website.
- ✓ You will be able to review the recording and slides of the Institutional Representative Webinars for all 4 commissions.

First ... A Bit of Housekeeping

We will not be providing technical support during today's webinar

If you have trouble with this webinar, you will be able to view the recording on our website after the webinars have been completed.

Q&A During Webinar

- You may ask questions during this webinar.
- Please use the Q & A button on the task bar at the bottom of your screen.
- We will attempt to address many of the questions that arise.
- If we were not able to answer your question, please ask your team chair.

Today's EAC Team

- **Jeff Fergus**
Past Chair
- **Mo Hosni**
Vice Chair of Operations
- **Dave Binning**
Chair
- **Lorraine Fleming**
Editor #02
- **Patsy Brackin**
Chair-Elect
- **Chris Weisbrook**
Chair, Training Committee

Agenda

Topics and activities
Welcome – Who is here, why are we here?
Preparing for a successful evaluation
The virtual review
The post-review process – Accreditation evaluation and actions
Interim actions; Consistency
Common shortcomings
Expectations for C3/C5 Changes
Concluding thoughts

Who Is On Call?

- Institutional representatives
 - ✓ Representing schools/colleges of engineering with evaluations scheduled during 2020-21.
- Members of the Engineering Accreditation Commission (EAC)
 - ✓ 115 members of the EAC for the 2020-21 cycle
 - ✓ 17 members-at-large of the EAC Executive Committee
 - ✓ 4 EAC Officers
 - ✓ Some former commission members who serve as Team Chairs.
- ABET Staff



Preparing for a Successful Evaluation

Dave Binning

While this year's program evaluations will be virtual, the expectation for quality and consistency remains unchanged

Why Are We All Here?

To set the stage for a successful review of your programs in the 2020-21 cycle by developing common understanding and expectations of activities

- Preparing for your review
- During your review
- Following your review

Who Is on Your Team?

- One team chair (TC)
 - ✓ Large reviews may have one TC and a co-chair
- Typically one program evaluator (PEV) for each program being evaluated
- Possibly one or more observers

Who Is on Your Team?

- Some of you may have simultaneous or joint reviews by more than one ABET commission
 - ✓ In this case, there will be two or three team chairs, plus evaluators for all programs being evaluated.

Who Are the Team Chairs?

- Team chairs are experienced program evaluators.
- They are nominated by ABET Member Societies
 - ✓ Elected by the EAC
 - ✓ Approved by ABET Engineering Area Delegation.
- New team chairs are trained and mentored by experienced team chairs, editors & ABET staff.
- Institution may decline a team chair for conflict of interest.
- Team chairs are evaluated each year by the visited institution, PEVs and their Editor 1.

Who Are the Program Evaluators?

- PEVs are selected and assigned by the professional society responsible for the program being evaluated.
- They have been trained by ABET.
- Each year they are evaluated by their team chair, fellow PEVs and program chair.

Who Are the Program Evaluators?

- You have an opportunity to disqualify a proposed evaluator if you believe a conflict of interest exists.
- If you have not done so already, please approve the TC and PEV nominations as quickly as possible to expedite finalizing your review team.

Who Are the Observers?

- Observers may be assigned to the team.
 - ✓ Some professional societies require newly trained PEVs to participate in an observer review before being assigned as a PEV on a team.
 - ✓ State boards may ask to assign an observer.
 - ✓ Sometimes international groups ask to send an observer.
- Observers have no vote in the recommended action.

Who Are the Observers?

- Observers normally shadow program evaluators.
- The institution may decline observers generally or may decline to accept a particular observer.

ABET Team Member Competencies

Review team members are expected to be:

- Technically current
- Effective communicators
- Professional
- Interpersonally skilled
- Team-oriented
- Organized

Feedback

- Your feedback is a key component in our continuous improvement efforts.
- Institutions – after the review
 - ✓ Complete the online TC evaluation (Dean or a designee).
 - ✓ Complete the online PEV evaluations (Program Chairs).
- Team chairs – after the review
 - ✓ Complete the online PEV evaluations.

Feedback

- Evaluation results are shared with the TCs and PEVs after the accreditation action is final.
- Your honest evaluation of a team member has no influence on the programs' accreditation outcomes.

Accreditation Timeline

18-21* Month Process



Pre-Virtual Review Preparations

Maintain open line of communication with your team chair throughout the planning phase of the virtual review.

- ABET Zoom video conferencing is the preferred online platform.
- If your institution is not allowed to use Zoom, you will need to discuss an alternative platform and make it available to the team.
- It is the TC's discretion in consultation with ABET HQ, to accept using an alternative platform.

What Happens After Team is Assigned?

- TCs and PEVs generally have questions as they review the Self-Study Reports and the transcripts.
 - ✓ Advance communication of these questions makes for a more effective review.
 - ✓ Many questions can be answered before the virtual review.
 - ✓ Preparations can be made if questions need to be addressed during the virtual review.
- **Important note:** All communications between PEVs and program chairs should be copied to the dean and team chair.

What Happens After Team is Assigned?

- The interviews and virtual review schedules will need to be finalized.
- Agreement should be reached on review materials.



Questions?



Virtual Review

Mo Hosni

Virtual Review: Scope and Expectations

- **Planning** – There will be NO team travel to any on-site location. Teams will handle all planning and organization virtually.
- **Materials** – Programs are to provide all materials electronically (e.g., institutional system, Dropbox, email etc.).

No printed, USB, or physical formats will be requested or accepted.

Virtual Review: Scope and Expectations

- **Facility Tours** – Programs will provide for virtual tours of the facilities and labs.
- **Interviews** – Teams will conduct all interviews of faculty, students, and staff virtually.

Virtual Review: Scope and Expectations

- **Exit Meeting** - The Exit Meeting will occur virtually.
- **Information Technology** - Zoom will be the default videoconferencing platform supplied and supported by ABET.

Institutional requirements may drive an alternative videoconferencing platform.

COVID 19 Impact on Program Delivery

We understand you (and institutions world-wide), beginning March 2020, may have encountered the following:

- ✓ Faculty and staff working remotely due to the global pandemic
- ✓ Courses transitioning to fully-online
- ✓ Laboratories being unavailable
- ✓ Grading system changes (e.g. pass/fail)
- ✓ Students studying under difficult circumstances
- ✓ Data being difficult to collect and documentation difficult to produce

Team Operational Mindset

The ABET review team:

- Will NOT judge your program(s) based on your response to COVID-19.
- Will evaluate the program and its processes over the duration of the accreditation cycle for compliance with the criteria and the APPM, rather than using just a snapshot in time.
- Will be reasonable in our approach and decision-making without compromising the quality and integrity of the review.

Virtual Review Dates and Duration

- We recommend scheduling your virtual review between November 2020 and February 2021.
 - ✓ This allows you and the team time to plan to transition to a virtual review.
- Virtual reviews may be extended beyond 3 days, but no longer than 1 week.
 - ✓ Team members and institutions may be in multiple time zones (you and the team will need to be flexible with the workday).
 - ✓ Some activities may need additional time to complete in the virtual modality.

Planning/Transition Timeline

- At least eight weeks are needed to convert from a conventional to virtual review.
- The planning timeline involving the TC, the PEVs, the institution and its programs includes:
 - ✓ Setting the schedule to include virtual interviews, meetings, and facility tours
 - ✓ Providing electronic support materials and access for team review
 - ✓ Establishing IT hardware and testing

Support/Display Materials

- Guided by APPM I.E.5.b. (2) – (8)
- Requirements are not different for virtual reviews; however, the timing and methods of submission, organization, and presentation may be different.
- The program must make materials available at least one month prior to the start date of the virtual review.
- Work with the Team Chair (and PEVs) to determine what materials they will require and where the materials will be located.
- Note, the APPM does NOT require access to textbooks. If a textbook question arises, the program may need to provide access to a specific text.

Support/Display Materials

- If an institutional system is used to provide access to evidence and documentation, team members must be given access to your network and the software.
- Guidance or training material on the institutional system must be provided so the team members can efficiently find evidence and documentation.
- Timeliness and testing are critical for the team to be able to conduct its work.
- Translation will be needed where the language of instruction is not English (follows APPM I.D.1.g.).

Guidance on Supporting Student Work

- Evidence of extent of attainment of student outcomes
 - ✓ Student work used for outcome assessment
- Evidence of appropriate classification of engineering, math, basic science topics, as needed
- Demonstration of required components of culminating design experience
 - ✓ Sufficient complexity in design
 - ✓ Use of applicable engineering standards and realistic constraints

Facility Tours

- Correlate with laboratories and associated equipment items listed in the Self-Study Report.
- Provide annotated photographs.
 - ✓ Allows the PEV to view the various instruments and equipment used.

Facility Tours

As soon as facilities are accessible, provide narrated, recorded videos.

- ✓ Include Labs, classrooms, library, and computing services
- ✓ Short videos (10 min/lab, one video/lab or other location)
- ✓ Smartphone quality will suffice – need audio and video
- ✓ Include name, location, signage, general layout, safety, courses supported, instructional equipment, etc.
- ✓ Early testing using a sample video to verify usability by team

Facility Tours

- Later, the team may request a live, on-camera walk through the facility if it is accessible.
- If facilities are not accessible, you will have the narrated videos as back up.

Interviews

- Provide a private, well-connected, and suitably equipped location for one-on-one interviews. Video should be enabled to enhance communication.
- For group interviews, establish participant location, IT requirements, and A/V hardware needed to have a productive meeting.
- Testing is critical in all interview locations.
- Need to have institutional IT staff available for set up, testing, and troubleshooting.

Exit Meeting

- Similar to those conducted in conventional reviews, but may be abbreviated in duration.
- Program Audit Form (PAF) will be emailed to the dean following the Exit Meeting.

Information Technology

- Identify all personnel involved in the review.
- Identify your IT point of contact for the team and ABET HQ IT personnel.
- Zoom is the default ABET videoconferencing platform.
 - ✓ Team chair and PEVs will set up meetings. You will need to provide support at the institution.
- If your institution requires an alternative videoconferencing platform, you must provide access, set up meetings, provide training, and support to the team.

Information Technology

- Need to establish and test minimum IT requirements.
 - ✓ Bandwidth, wired and wireless connectivity, and security. Wired (ethernet) connectivity is always preferable.
 - ✓ Identify headset and microphone requirements for one-on-one and group interviews. Provide A/V hardware, training, and support to all institutional participants.
- Establish backup plans.

HQ Directive on Electronic Recording of ABET Accreditation Meetings

- Any type of electronic recording of live ABET accreditation conversations or meetings is prohibited.
- This policy applies to ABET Accreditation staff, volunteers, and the institutions involved in evaluation reviews.
- For accreditation reviews this applies to review planning meetings, ABET team meetings, exit meetings and faculty, staff and student interviews.
- Exceptions to this directive are the pre-recorded laboratory tours.
- All parties involved in the pre-recorded laboratory tour must be identified by name and provide their recorded consent to be recorded.

Planning and Next Steps

- The TCs and PEVs have undergone extensive training developed specially for the 2020-21 review cycle.
- The TC will provide you with explicit and detailed guidance on all critical areas of the review identified in previous slides.
- Communicate early and often with the team to assure the review will be trouble-free and productive.

Planning and Next Steps

- A team of ABET Adjunct Accreditation Directors, HQ Staff, and an IT team will also be available to teams to support virtual reviews.
- Finally, if you have questions, reach out to your team chair.



Questions?



The Virtual Campus Review

Lorraine Fleming

*The program must demonstrate that
the criteria are met*

Objectives: Virtual Campus Review

- Qualitatively assess factors that cannot be documented in the Self-Study Report (*e.g. virtual tour of labs and facilities*)
- Interview faculty, staff, students & administration
- Provide preliminary assessment of strengths and shortcomings
- Assist with quality improvement efforts of the institution and program

Virtual Review Activities: Formerly Day 0

Takes place at least 30 days prior to virtual review dates.

- Planning meetings
 - ✓ PEVs & program chairs
 - ✓ TC & dean or her designees
 - ✓ ABET Team to review preliminary findings
- Team may request additional information and further explanation—for example:
 - ✓ Course and culminating design materials
 - ✓ Assessment data and analysis
 - ✓ Minutes of meetings
- Virtual tour of facilities supporting the program (e.g. laboratories, computer rooms, classrooms) *Follow the virtual lab tour guidelines.*

Virtual Review Activities: Formerly Day 1

Day 1 activities may extend over 1-4 days.

- College Presentation and Q&A
- PEV meetings with
 - ✓ program chairs
 - ✓ faculty, students, and staff
 - ✓ advisory board members, alumni
 - ✓ representatives of support departments (*e.g. math, physics*)
- TC meetings with
 - ✓ institutional/college officials (*e.g. associate dean, president, provost, registrar, finance, admissions, placement, assessment*)
 - ✓ dean to update on findings

Virtual Review Activities: Formerly Day 2

Day 2 activities may extend over 1 or 2 days.

- Follow-up meetings with faculty and staff, as needed
- ABET Team Meeting finalizes findings, exit statements, review forms, and documents
- Briefings on exit findings
 - ✓ TC briefs dean
 - ✓ PEVs brief program chairs
- Virtual exit meeting

Virtual Exit Meeting: Formerly Day 2

- Purpose: Report team findings to CEO, Dean & others invited by institution
- PEVs read exit statements that may include strengths, shortcomings, and observations. *(Note that after the exit meeting, all communications are between the TC and the dean)*
- Program Audit Form (PAF) that documents the team findings is emailed to the Dean. *(Program should start working on any shortcomings immediately after the review.)*

Program Audit Form (PAF)

Aerospace Engineering

Used Program Criteria *Aerospace and Similarly Named Engineering Programs*

Visit held October 4–6, 2020

Team Chair: George Smith

Program Evaluator(s): Mary Sharp

PROGRAM AUDIT SUMMARY

Definition of Terms

C (Concern) A concern indicates that a program currently satisfies a criterion, policy, or procedure; however, the potential exists for the situation to change such that the criterion, policy, or procedure may not be satisfied.

W (Weakness) A weakness indicates that a program lacks the strength of compliance with a criterion, policy, or procedure to ensure that the quality of the program will not be compromised. Therefore, remedial action is required to strengthen compliance with the criterion, policy, or procedure prior to the next evaluation.

D (Deficiency) A deficiency indicates that a criterion, policy, or procedure is not satisfied. Therefore, the program is not in compliance with the criterion, policy, or procedure.

	Previous Review	Current Review
<i>No deficiencies or weaknesses</i>	X	X
1. Students		
2. Program Educational Objectives		C
3. Student Outcomes		
4. Continuous Improvement		
5. Curriculum		
6. Faculty		
7. Facilities	C	
8. Institutional Support		
Program Criteria		
Accreditation Policy And Procedure Manual		

Program Audit Form (PAF)

Criterion 2. Program Educational Objectives

The process of reviewing the Program Educational Objectives must be Documented, systematically utilized, effective, and involve the program constituencies. While there is evidence that the Objectives were revised, no evidence was presented that it was documented and systematic process. Not having the Programs Educational Objectives reviewed by the programs constituents on a regular basis, can lead to the program not preparing graduates to meet the needs of the constituents.

Criterion 3. Student Outcomes

No shortcomings relative to this criterion at this time.

Criterion 4. Continuous Improvement

No shortcomings relative to this criterion at this time.

Criterion 5. Curriculum

No shortcomings relative to this criterion at this time.

Criterion 6. Faculty

No shortcomings relative to this criterion at this time.

Criterion 7. Facilities

No shortcomings relative to this criterion at this time.

Criterion 8. Institutional Support

No shortcomings relative to this criterion at this time.

Program Criteria

No shortcomings relative to this criterion at this time.

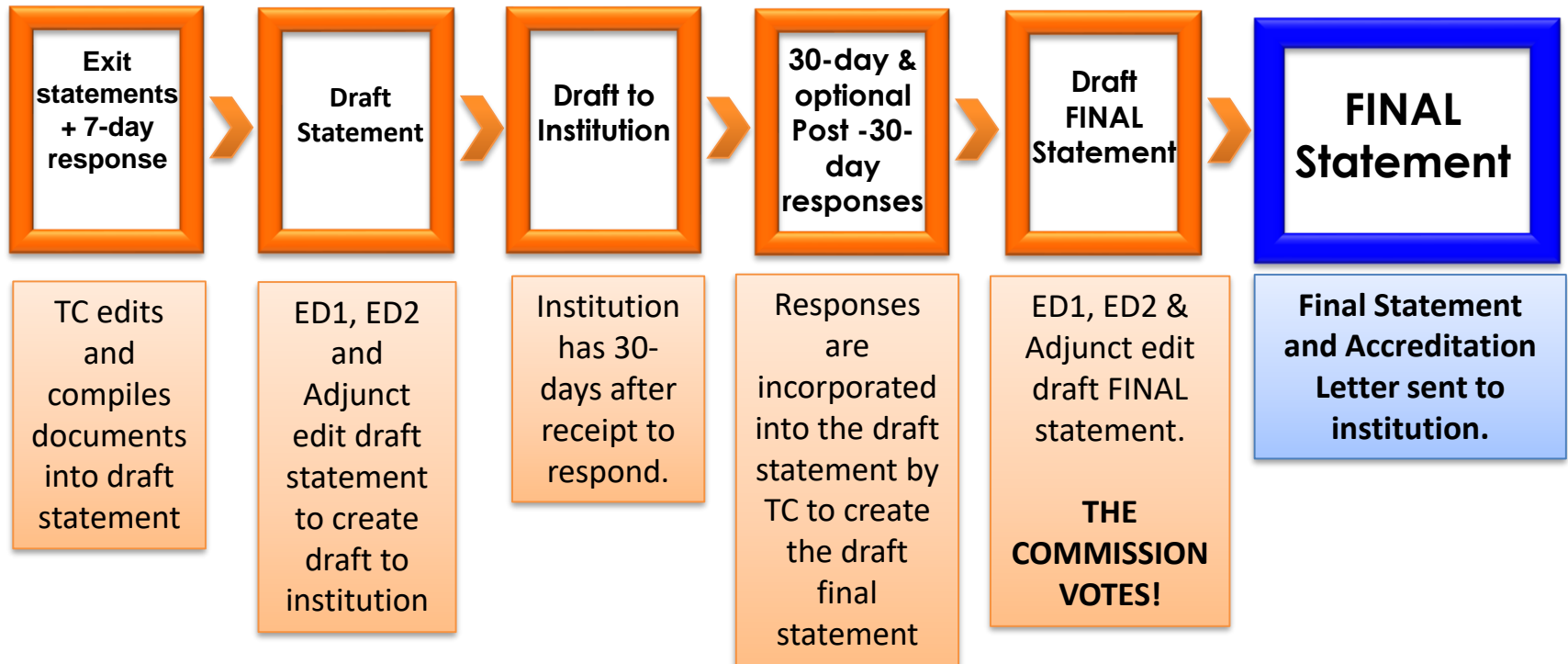
Important Points

- The PAF reflects shortcomings identified at the time of the review.
- *For consistency in application of criteria across institutions the following may occur during the editing process:*
 - ✓ A shortcoming identified at one level on the PAF may be framed at a different level.
 - ✓ A shortcoming not indicated on the PAF may be included in the draft statement (rarely occurs).
 - ✓ An observation at the time of the review may be cited as a shortcoming in the draft statement.



It's Not Over
Until the Full Commission Votes

Post-Review Process



Key	
TC	<i>Team Chair</i>
ED1, ED2	<i>Editor, Member of the EAC Executive Committee</i>
Adjunct	<i>Very experienced ABET editor</i>

Post-Review Process Institution Responses

7-day response

- Correct errors of fact *only* (e.g. enrollment and graduation data)
- Other materials will be considered with the 30-day due process response.

30-day due process response

- At the end of the review, begin work to address the shortcomings identified in the Program Audit Form (PAF). Do not wait on the Draft Statement to begin.

Post-Review Process Institution Responses

Post 30-day due process response (*optional*)

- Team Chair has the sole discretion to accept or not accept materials submitted after the 30-day due process period.
- Material must be submitted at a reasonable, agreed-upon time before the Commission meeting in July.
- Submission is limited to materials that were not available when the due process report was uploaded (e.g. project reports/transcripts for the most recent academic term).

Post-Review Process

Important Points

- Communicate with your Team Chair throughout the process.
- Upload all institutional documents and responses to AMS.
- Address and resolve shortcomings quickly. *Resolution of shortcomings is the desired result!*

Post-Review Process

Important Points

- Accreditation actions are FINAL when the Commission votes.

TARGET DATES	
Draft Statement (uploaded)	February - March
Commission votes	July
Final Statement (uploaded)	August

- Only “Not to Accredite” actions can be appealed.



Questions?



Accreditation Evaluation and Actions

Jeff Fergus

What words might I hear?

What do they mean?

Shortcoming Definitions

Deficiency	<i>A criterion, policy, or procedure is <u>not</u> satisfied. Therefore, the program is not in compliance with the criterion, policy, or procedure.</i>
Weakness	<i>A program <u>lacks the strength of compliance</u> with a criterion, policy, or procedure to ensure that the quality of the program will not be compromised. Therefore, remedial action is required to strengthen compliance with the criterion, policy, or procedure prior to the next evaluation.</i>
Concern	<i>A program currently satisfies a criterion, policy, or procedure; however, <u>the potential exists</u> for the situation to change such that the criterion, policy, or procedure may not be satisfied.</i>
Observation	<i>A comment or suggestion which does not relate directly to the accreditation action but is offered to assist the institution in its continuing efforts to improve its programs (i.e. friendly advice).</i>

Accreditation Actions

TYPE OF REVIEW		D and W Shortcomings (duration)		
		No W's, No D's	W, No D's	D
GENERAL REVIEW	existing programs	NGR (6 years)	IR or IV (2 years)	SCR or SCV (2 years)
	new programs	NGR (6 years)	IR or IV (2 years)	NA
	following SCR or SCV	NGR (6 years)	IR or IV (2 years)	SCR or SCV (2 years) or NA ¹
INTERIM REVIEW	following IR or IV	RE or VE (2 or 4 years)	IR or IV (2 years) ²	SCR or SCV (2 years) ²
	following SCR or SCV	SE (2 or 4 years)	IR or IV (2 years) ²	SCR or SCV (2 years) ² or NA ¹

NGR	Next General Review
IR	Interim Report
IV	Interim Visit
SCR	Show Cause Report
SCV	Show Cause Visit
RE	Report Extended ³
VE	Visit Extended ³
SE	Show Cause Extended ³
NA	Not to Accredit
T	Terminate ⁴

¹ NA—Accreditation action for programs that have not resolved a Deficiency(D) within two years following an SCR or SCV.

² When the accreditation action is a second consecutive interim review, the remaining shortcomings will be scrutinized during the next general review review.

³ Interim evaluations only.

⁴ Initiated by institutions for programs being discontinued or for which accreditation is no longer being maintained.

Accreditation Actions for General Reviews 2018-2019

Action	Programs	Percent of Programs
Next General Review (NGR)	489	87.9
Interim Report (IR)	58	10.4
Interim Review (IV)	0	0.0
Not To Accredit (NTA)	3	0.5
Show Cause Report (SCR)	2	0.4
Show Cause Review (SCV)	0	0.0
Termination <i>(Action by Institution)</i>	2	0.4
Withdrawn <i>(Action by Institution)</i>	2	0.4
TOTAL	621	100

EAC Criteria 1, 2, 3 and 4 Shortcomings for 2018-19

Shortcoming Level →		D	W	C	Total
Criterion 1: Students	Draft	3	33	29	65
	30-Day	0	3	12	15
	Final	0	4	8	12
Criterion 2: PEOs	Draft	1	75	3	109
	30-Day	1	17	13	31
	Final	0	10	12	22
Criterion 3: Student Outcomes	Draft	0	4	3	7
	30-Day	0	0	2	2
	Final	0	0	2	2
Criterion 4: Continuous Improvement	Draft	5	103	24	132
	30-Day	1	59	21	81
	Final	1	37	19	57

EAC Criteria 5, 6, 7 and 8 Shortcomings for 2018-19

Shortcoming Level →		D	W	C	Total
Criterion 5: Curriculum	Draft	26	64	17	107
	30-Day	12	35	14	61
	Final	4	15	12	31
Criterion 6: Faculty	Draft	0	15	50	65
	30-Day	0	8	40	48
	Final	0	4	35	39
Criterion 7: Facilities	Draft	0	10	22	32
	30-Day	0	4	14	18
	Final	0	4	10	14
Criterion 8: Institutional Support	Draft	3	10	54	67
	30-Day	0	5	37	42
	Final	0	1	28	29

EAC Program Criteria, APPM & Master's Level Shortcomings for 2018-19

Shortcoming Level →		D	W	C	Total
Program Criteria	Draft	3	21	14	38
	30-Day	0	9	5	14
	Final	0	4	5	9
APPM (Accreditation Policy and Procedure Manual)	Draft	4	27	1	32
	30-Day	1	2	0	3
	Final	1	4	0	5
Master's Level	Draft	0	0	0	0
	30-Day	0	0	0	0
	Final	0	0	0	0



Interim Evaluations

Interim Actions

- Interim Report (IR or SCR)
 - ✓ Recommended when the resolution of shortcomings can be documented with a report (e.g., faculty hiring);
 - ✓ A different team chair is assigned to review the interim report.
 - ✓ No team is sent to campus.
- Interim Review (IV or SCV)
 - ✓ Recommended when the resolution of shortcomings cannot be determined by review of a report, or when previous written information has not been effective in providing the necessary evidence.
 - ✓ A new team performs a virtual review.

Interim Evaluation

- IRs or IVs resulting from the 2020-21 cycle will take place in the 2022-23 cycle.
 - ✓ Institution will submit report by 1 July 2022.
- ABET HQ forwards the previous final statement for the institution to the TC.
- If an institution has programs with both IV and IR actions, the TC for the IV will also review the IR.
 - ✓ TC may discuss IR issues with the dean during the virtual campus review.
 - ✓ No PEV will be assigned for IR reviews.
- The applicable criteria are the criteria that were in effect at the time the shortcomings were identified, unless the institution requests that later criteria be applied.



Consistency

Accreditation Decisions Are Not Simple!

- Each institutional context is unique.
- The EAC works very hard to ensure consistency.
- The overriding goal is to achieve an end result in which programs with similar observed shortcomings are accorded the same actions.
- Ideally there are no deficiencies or weaknesses, in which case an NGR is the action!

Consistency at the Team Level

Teams strive to ensure consistency **across all programs evaluated at the institution.**

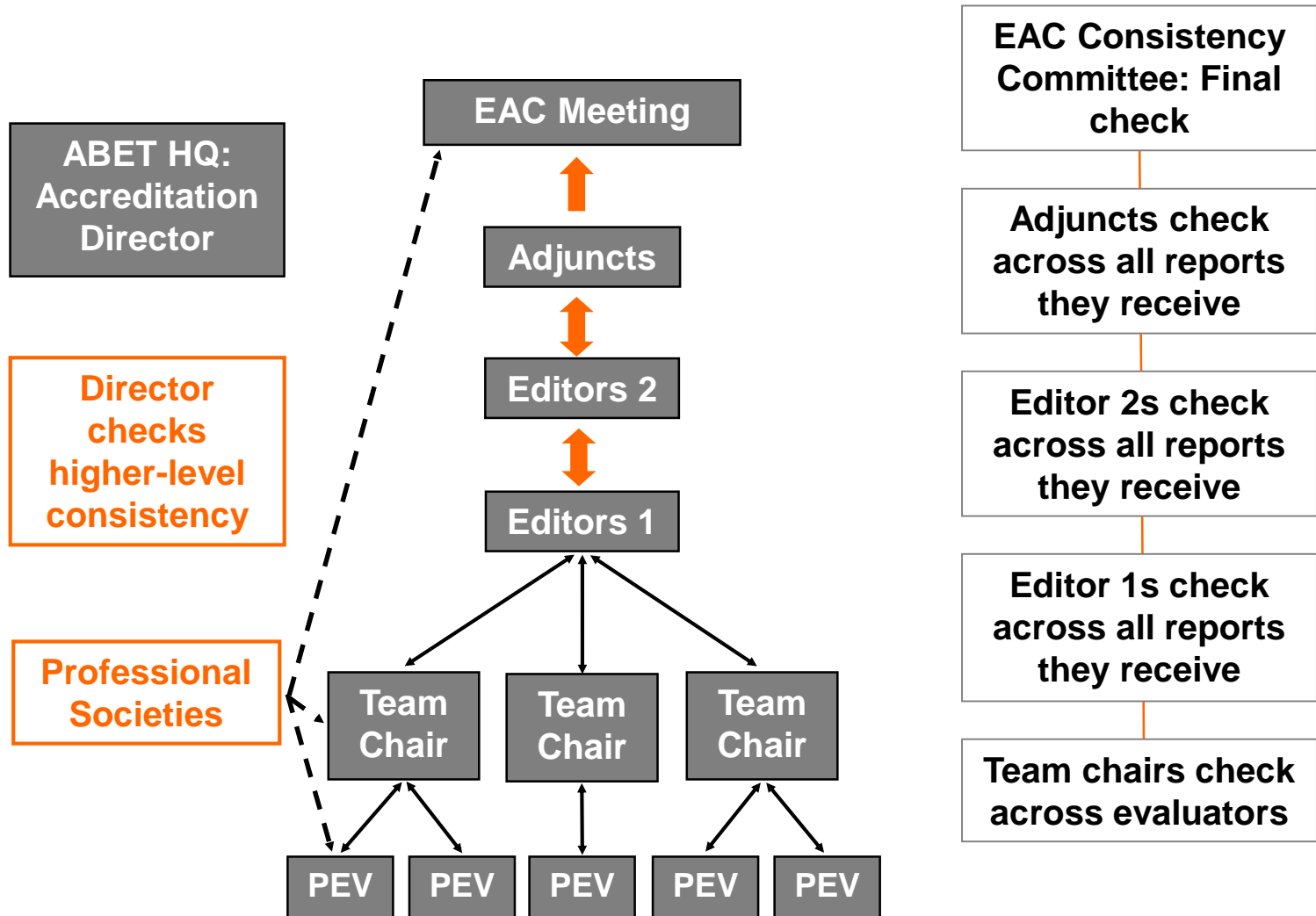
- Consistent depth and completeness of the evaluation across all programs
- Consistent assignment of appropriate key terms (deficiency, weakness, concern) to describe shortcomings
- For weaknesses, consistency on interim recommendations — IR versus IV

Consistency Checks at the Commission Level

The commission also strives to ensure consistency.

- Accreditation actions must be consistent **across all programs** and **across all institutions**.
- Accreditation actions must be consistent with those given for other programs with **similar shortcomings** (weaknesses, deficiencies).
- Consistency is **checked at five levels** to various degrees of detail.

Consistency Checks





Questions?



Common Shortcomings

Patsy Brackin

Common Shortcomings

- Criterion 1: Students
 - ✓ Ad hoc advising on career or curricular issues
 - ✓ Lack of documentation on prerequisite exemptions or course substitutions
- Criterion 2: Program Educational Objectives
 - ✓ Incomplete process for review of PEOs
 - ✓ PEOs aren't consistent with the definition
- Criterion 3: Student Outcomes
 - ✓ All aspects of (1)– (7) not included

Common Shortcomings

- Criterion 4: Continuous Improvement
 - ✓ Evaluation of assessment results not used for continuous program improvement
 - ✓ Data are not separated by program (e.g., EE and CpE)
- Criterion 5: Curriculum
 - ✓ Inconsistent assignment of courses into categories (math/basic science, engineering topics)
 - ✓ Insufficient hours in math/basic science or engineering topics
 - ✓ No use of constraints / standards in culminating design

Common Shortcomings

- Criterion 6: Faculty
 - ✓ Adequate number / lack of professional development
- Criterion 7: Facilities
 - ✓ Issues with maintenance or technical support of labs
- Criterion 8: Institutional Support
 - ✓ Inadequate support for labs or personnel

Common Shortcomings

Accreditation Policy & Procedure Manual (APPM)

- ✓ Incorrect accreditation citations
- ✓ Inconsistent references to program names
- ✓ Safety issues



Expectations for C3/C5 Changes

C3 and C5 changes

- C3 (1) through (7)
- C5 credit allocation change
 - ✓ Math and Basic Science 30 credits
 - ✓ Engineering topics 45 credits
- Definitions section added to EAC criteria

Timeline for implementation

- Approved by ABET Board of Delegates for 2019-2020 accreditation cycle
- Applicable for all NGR reviews
- Exceptions to implementation
 - ✓ IR or IV awarded before 2019-2020 cycle
 - ✓ These program have option to use criteria at time of IR/IV being received or new criteria
 - ✓ All programs at an institution must use same criteria

Aggregating Assessment Results

- Not necessary to aggregate data from (a)-(k) and (1)-(7); okay to do if programs find it useful
- In the 2020-2021 cycle, with over a year of new criteria assessment data, programs should:
 - ✓ Have 5 years of (a)-(k) assessment data plus continuous improvement based on evaluation results
 - ✓ Have implemented (1)-(7) including data, attainment, and continuous improvement as practical

One possible scheme

Year	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Criteria Scheduled for Assessment /Evaluation	A-E		A-E		A-E		
		F-K		F-K			
						1-3	
							4-7



Can SOs be added to (1)-(7)?

- Yes, but all SOs must be assessed & evaluated

Impact on MS programs?

- EAC-ABET accredited BS program grads:
 - ✓ Are assumed to have satisfied either (a)-(k) or (1)-(7).
- Graduates not from accredited BS programs:
 - ✓ Must demonstrate that they have attained (1)-(7) and C5 requirements in their undergraduate work.

Changes in Definitions

- **Computer science:** engineering topic not basic science
- **Basic science:** adds “other natural sciences including life, earth and space sciences”
- **College-level math:** pre-calculus and remedial math are not considered “college-level”

Changes in Definitions

- **Complex engineering problems:** examples of characteristics of complexity listed in definition
- **Engineering design:** includes consideration of risk
- **Team:** requires diversity of skills, backgrounds or perspectives

Special Attention in New Criteria

- **SO1: Complex Problems:** programs need to demonstrate ability to solve; complexity defined
- **SO2: Engineering Design:** list of factors that must be considered – even if one or more factors do not influence design
- **SO3: Communication:** each program must determine “range of audiences”
- **SO4: Responsibilities:** judgments must consider impact in all: global, economic, environmental and societal contexts

Special Attention in New Criteria

- **SO5: Teams:** inclusiveness must be defined, and project (task) management demonstrated
- **SO6: Experimentation:** no requirement to design experiments, but must show use of judgment in drawing conclusions
- **SO7: New Knowledge:** broad; such as identifying needed information, reviewing literature and information, using appropriate sources, applying information

Level of shortcoming for SOs

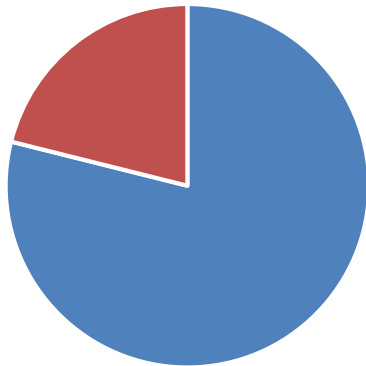
- Reviewing team decision; made while on campus
- Cited under C3 or C4, as appropriate
- Minimum requirements
 - ✓ SOs are (1)-(7), plus any added by the program
 - ✓ Plan should exist for implementing assessment of (1)-(7) attainment and evaluating assessment data
 - ✓ Programs should have started this plan
 - ✓ Programs may have only limited data – evaluation
 - actions (CI) based on (1)-(7)

Mapping / assessing / evaluating

- Many performance indicators from (a)-(k) will apply directly to (1)-(7)
- Many programs may need only minor adjustments to prior assessment processes
 - ✓ 2020-2021: transition must be well underway or completed
- Programs that made major changes to assessment or evaluation processes should:
 - ✓ Show an implemented transition

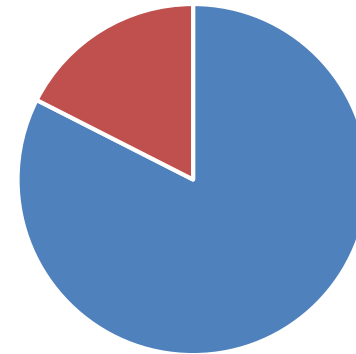
Data from approximately 101 Institutions and 438 Programs visited by EAC (2019-20 cycle)

101 out of 128 Institutions
Visited Reported Data



■ Reporting ■ Not Reporting

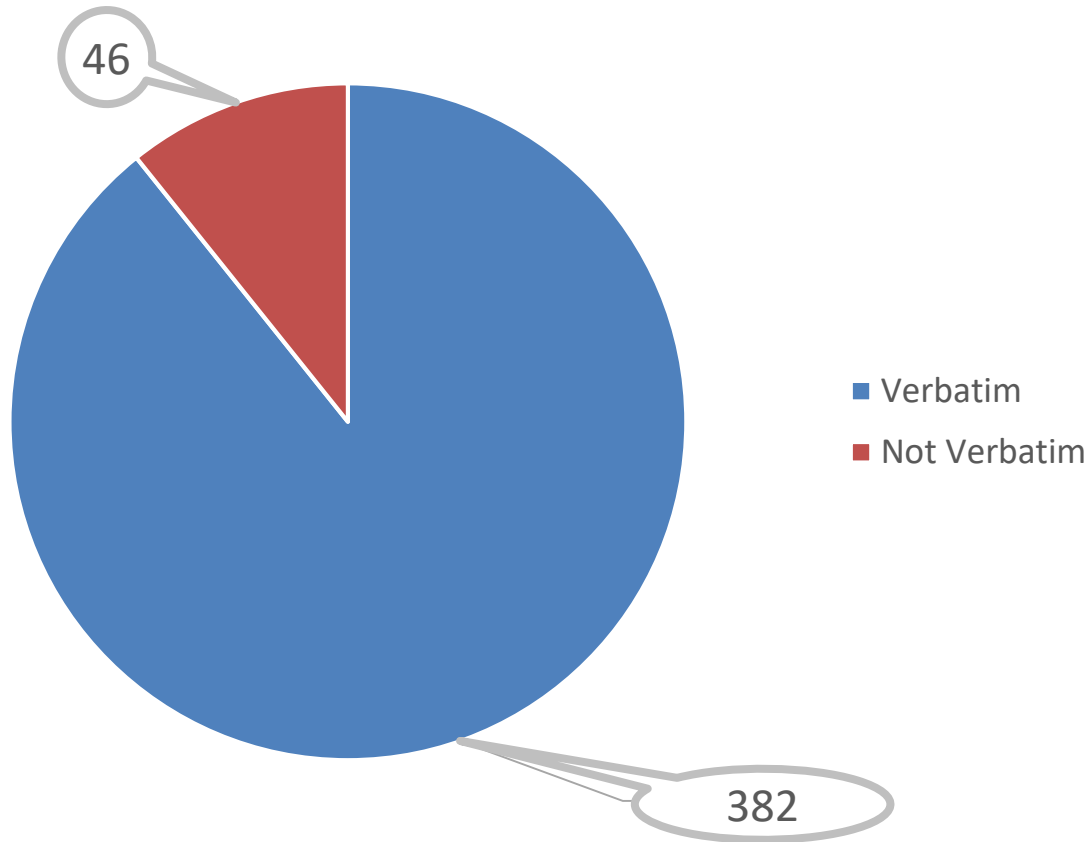
438 out of 531 Programs
Visited Reported Data



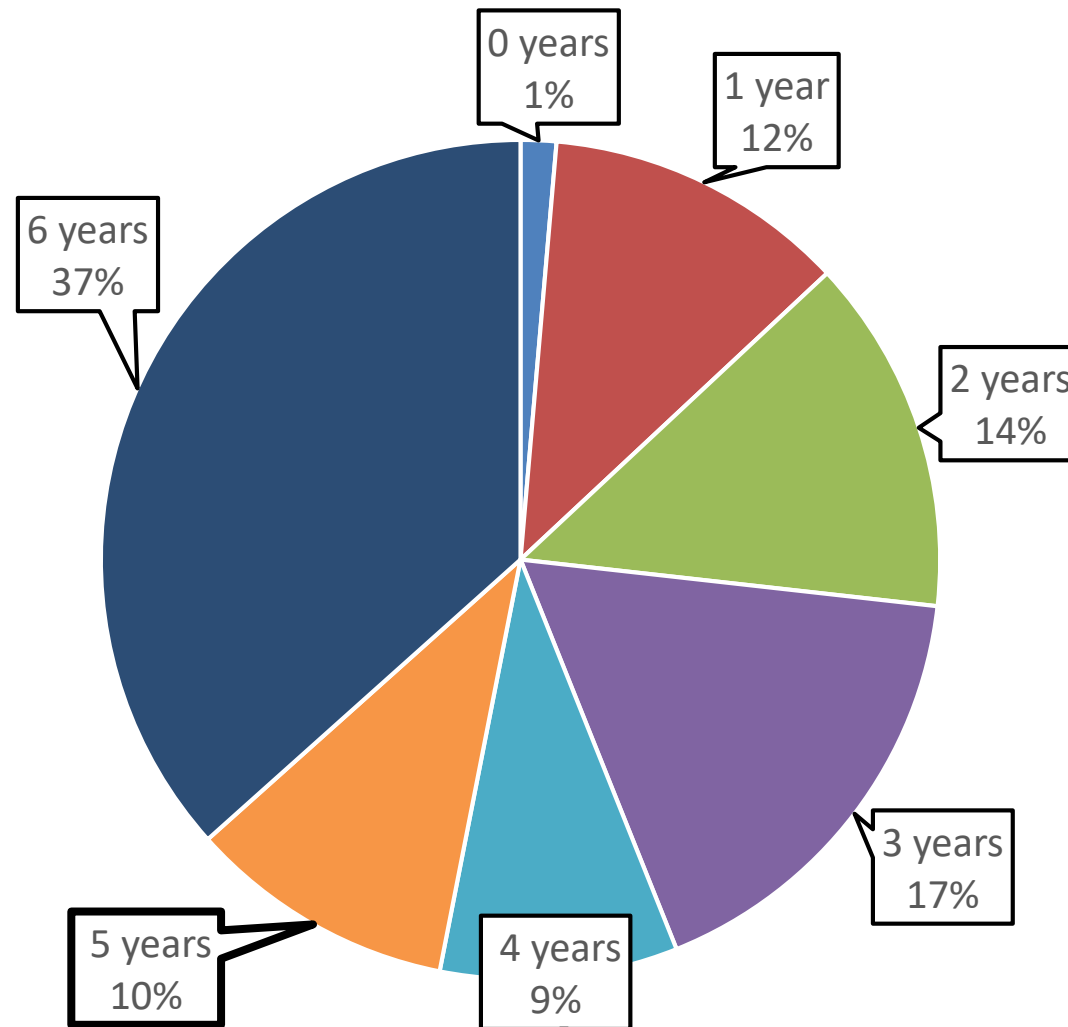
■ Reporting ■ Not Reporting

Most programs (89%) used the SO Verbatim

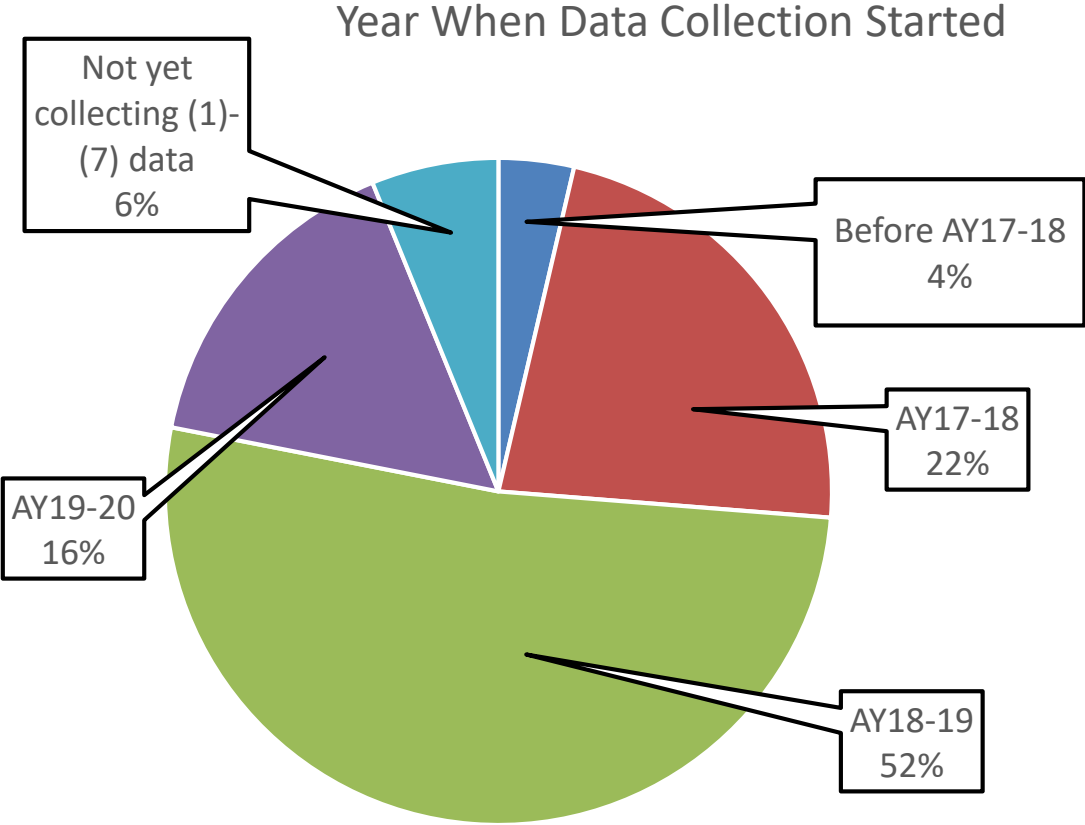
Programs Using ABET Student Outcomes Verbatim



No. years of Assessment Data Reported by Program



Most programs began collecting data in AY18-19





Questions?



Concluding Thoughts

Dave Binning

Keys to a Successful Review

- On-going compliance with the criteria
- Good communication with team chair and PEVs
- Accessible Supporting Materials
- Timely 7-day and Due-Process responses

Nobody Wants to Think About It, But What If...

- The program thinks the PEV does not understand or is being overly picky.
- The disgruntled faculty member is one that the PEV chooses to interview.
- Something unusual happens during the review

Don't worry, talk to your team chair!

More Information

Reference material (www.abet.org):

- *Accreditation Policy and Procedures (APPM)*
- 2020-21 Criteria for Accrediting Engineering Program
- Manual of Evaluation Process
- Program Evaluator Workbook
- Self-Study Questionnaire



Questions?



Thank You

*For seeking ABET Accreditation for your
Programs & for being with us today*