


Work Experience Reporting Orientation

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Presentation Purpose

- General orientation to the whole experience reporting / review process
- Address common misunderstandings and omissions
- Reduce report re-submissions and coaching letters
- Better enable ERC to do their job
- Presentation posted to APEGS web site under Apply, Work Experience Reporting


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Who Participates in Experience Review

- Engineers-In-Training/Geoscientists-in-Training
- Academic Review Cases
- Engineering/Geoscience Licensee Applicants
- Supervisors
- Mentors
- Experience Review Committee Members
- APEGS staff

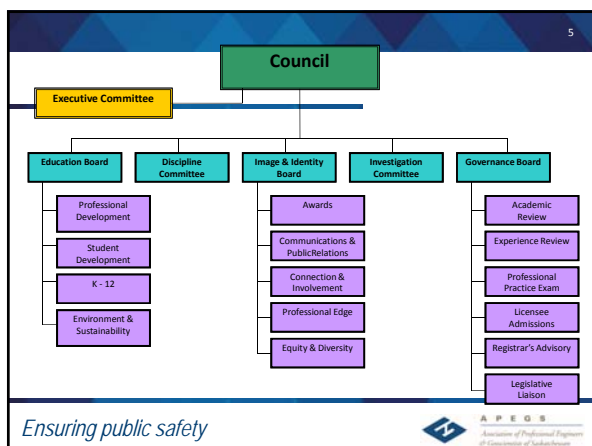
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APEGS Organization

- Approximately 13,900 members (as of Sept 2016)
 - ~ 8,900 P.Eng.
 - ~ **1,800 Engineer-in-Training**
 - ~ 700 P.Geo.
 - ~ **200 Geoscientist-in-Training**
 - ~ 90 Eng & Geo Licensees
 - ~ 30 Temporary Licensees
 - ~ 900 Life Members
 - ~ 1,300 Certificate of Authorization (corporate)
- Non-profit organization
- Financed by member fees


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Experience Review Stats

- Approx 1300 reports annually and growing
- 36 committee members
- Meetings every 6 weeks +/-
- 110 to 230 reports per meeting
- Peer review process... Put in the same effort as for work for your boss or clients

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Experience Reporting

- Means by which professional qualification is demonstrated
- Structured guidance from supervisors / mentors and from APEGS:
 - ensures that acceptable experience is being obtained,
 - professionalism and ethics are being developed,
 - professional licensure achieved seamlessly

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Experience Review

- 4 years of “acceptable” work experience (does not have to be sequential – pick your best 4 years if you have more than 4 years experience)
- At least one year “equivalent to Canadian”
 - Canadian graduate studies does **not** count for the Cdn experience requirement
- At least some “recent” (anything from within past two years) at time of professional application
- Direct supervision of a professional member or professional member mentor (exception – international experience)

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Experience Reporting

- Written by the member-in-training, signed by the supervisor (and mentor if required)
- At least 3 experience reports required:
 - 1 yr (Interim Report)
 - 2 yrs (Interim Report)
 - 4 yrs (Final Report)
 - More than 3 required if you change employers or have a change in job function
- No minimum time required for a report (for ex – Final Report can be 3 months long)
- # months experience credit cannot exceed calendar time
- Final Report most important / critical!

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Other Experience Credit

- Pre-grad experience credit – max 12 months, any of the following:
 - Exceptional technologist experience (technologists who go back to university)
 - from second half of bachelor degree
 - No opportunity for “mentor” arrangement with pre-grad – has to be supervised by a P.Eng. or P.Geo.
 - write up reports asap, hold until you are approved as member-in-training

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Other Experience Credit – cont’d

- Graduate studies:
 - Thesis-based Masters – max 12 months
 - PhD – max 24 months (but graduate studies max total 24 months)
 - Can submit other work done at same time as graduate degree (as long as not related to the degree)
 - ex – Teaching Assistant, working part-time while doing a Masters, etc
 - Separate reports
 - # months experience credit granted cannot exceed calendar time

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International Experience

- Experience from anywhere in the world and from any time period is eligible for review
- Maximum 3 years international and graduate studies experience combined (1 year reserved for “equivalent-to-Canadian” to total 4 years)
- Supervisor does not have to be P.Eng. or P.Geo. registered in Canada but has to be recognized as an “engineer” or “geoscientist” in that country (if not, mentor required)

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Experience Reporting

- The Experience Review Committee reviews the reports and provides results
- Detailed feedback if required (coaching letter or re-submission)

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Experience Reports

- Supervisor (and mentor) make the judgment call on satisfactory progress
- About ¾ page limit as indicated by the text boxes in the forms. Possible to expand the text boxes, but it should not be necessary
- Writing concisely is a necessity
- No limitation on supervisor / mentor comments

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Communication and Working Skills

- Completed by the supervisor (and mentor if applicable)
- 6 areas evaluated:
 - Verbal and written communication, interpersonal skills, time mgmt, responsibility, character
- Supervisor/mentor completes comments on any area that needs improvements (NI)
- “NI” not necessarily critical – coaching purposes for member-in-training

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Defining satisfactory engineering or geoscience work...

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Engineering Work Defined

Section 2(m) of the Act:

- Any act of planning, designing, composing, measuring, evaluating, inspecting, advising, reporting, directing or supervising, or managing any of the foregoing; that
 - requires the application of eng’g principles
 - concerns the safeguarding of life, health, property, economic interests, the public interest or the environment.

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Components of Acceptable Engineering Work Experience (Experience Guideline 2):

- Application of theory – 6 examples
- Practical experience – 6 examples
- Management of eng’g – 3 examples
- Social implications – 3 examples
- Communication and working skills

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Geoscience Work Defined

Section 2(n) of the Act: :

- Application of geoscience principles including the principles of
 - geology, geophysics and geochemistry
- to any act of acquiring or processing data, advising, evaluating, examining, interpreting, reporting, sampling or geoscientific surveying, that is directed toward:
 - the discovery or development of oil, NG, coal, metallic or non-metallic minerals, precious metals, water or other natural resources; or
 - the investigation of surface or sub-surface geological conditions.

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Components of Acceptable Geoscience Work Experience (Experience Guideline 3):

- Application of the Knowledge of Geoscience Principles and Practice – 6 examples
- Mgmt of Geoscience – 3 examples
- Social implications – 3 examples
- Communication skills

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Satisfactory Progress Defined

- Earlier stages:
 - May be of a routine nature
 - Emphasis placed on application of theory (and practical experience for EITs)
 - Reasonable level of social awareness
- It is expected that there will be progression with different projects and experiences, an increase in complexity and level of responsibility.

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Satisfactory Progress Defined

- Later stages:
 - Involvement in mgmt normally expected to increase over time but is balanced against technical experience
 - If primarily technical experience, appl. of theory (and practical experience) with reasonable level of social awareness are the basis of judgement
 - If primarily management experience, management of an engineering/geoscience function is the basis of judgement

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Satisfactory Progress Defined

- Overall, committee is looking for:
 - **progression** from report to report
 - **professional** experience:
 - Application of engineering/geoscience knowledge and education to specific problems
 - original thinking in achieving end result
 - making decisions
 - assuming technical responsibility
 - Ready for independent (although not isolated!) professional practice

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Experience reporting keys to success - 1

- Write as concise as possible (bullet points OK)
- Be very specific in describing work and be sure to identify your role in larger projects (use the word "I" frequently)
- Identify progression from previous reports wherever possible
- No blank sections
- Keep caught up in reporting

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Experience reporting keys to success - 2

- Do not use general, vague statements that do not refer to specific projects and the work you did is not clearly stated
- If confidentiality of projects is a concern, substitute project names and locations with surrogate names (for example, Project X located in Town Q)
- Various reports should not be identical
 - flag the differences between reports

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Experience reporting keys to success - 3

- The **quality of the report is expected to be at a professional level**, just the same as any engineering or geoscience report that will be released to a supervisor, colleague or a client. Experience reporting is a peer review process and there will be a number of your peers reading the report.
- **DO NOT** use words such as “assisted”, “involved with” or “participated” or similar general references to your work because these are not direct enough in identifying the work you did personally.

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Common grievance of reviewers – Social Implications (Part 4 for EIT, Part 3 for GIT)

- Significance of regulatory agencies
 - Name them
 - Name them all!
 - Don’t forget APEGS (The Engineering & Geoscience Professions Act)

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Responsibility of Member-in-Training

- Responsible for their own success and the development of their career
- The experience report is a professional engineering / geoscience report being reviewed by many of your peers. Treat it as such.

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Trial Assessment

- How would you rate the following example in an experience report:

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Example 1 – Application of Theory

- Determined the scope of proposed HVAC projects and estimated corresponding energy loads to confirm the projects were within existing system capacity and wouldn’t cause negative effects from the technological point of view.

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Example 1 continued

Revised:

- For the Boardwalk Properties project in Regina, I analyzed heating requirements. There were four 6-floor residential buildings with a total of 240 apartments. The farthest building was 100 meters away from the main heating pipeline and 2700 metres of hot water pipe line was involved. I estimated energy load was around 100 KW, which was within the boiler's capacity.

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Example 2 – Practical Experience

- In the Sunset Care Home project, the heating system had been used for eleven years, and showed many signs of low efficiency, such as pipe wear, leakage and corrosion, decline of heat preservation, and high heat resistance. As a member of a team (one manager, two engineers and two technicians), I did the on-site investigation and recommended that major repairs were necessary.

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Example 2 continued

- First draft (rejected):**
 - Studied customers' needs and conditions of the HVAC system to identify with certainty that the proposed projects were necessary and would satisfy the customers' requirements.

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Key info to include:

- WHAT** you did
 - Specific engineering / geoscience example, background (if necessary), circumstances, your role / responsibilities
- HOW** you did it
 - Your tasks, methods, challenges, your role
- WHY** you did it
 - Your role, reasons
- OUTCOME**
 - What was the outcome of the situation, emphasize your contribution

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Role of Supervisor

- Guides the development of the member-in-training into a technically and capable professional
- Conveys understanding of the relationship with the employer/client, the professional Association and society
- Professional obligation to give fair and professional criticism when warranted.
- We assume supervisors and mentors are ethical, fair and impartial (fair even if there is a personality conflict)

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Role of Supervisor, continued

- Employers are encouraged to offer a full range and progression in responsibilities in work assigned so experience and exposure is gained in all areas (engineering: Guideline 2, geoscience: Guideline 3)
- Report review and sign off
- Include comments please! (but the report will still be reviewed if there are no comments)

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Multiple Supervisors

- If you have more than one supervisor in a reporting period:
 - Only the most recent one needs to sign BUT only if they are comfortable
 - May need all of them to sign

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Role of Supervisor, continued

Comments might include things like:

- Confirms that examples are accurate (indicate if MITs role was over-stated or under-stated)
- Level of guidance required (minimal, as expected, extensive)
- Extent to which MIT was responsible for producing the outcomes
- Complexity of the context wrt typical work-related situations experienced by professional licensed engineers and geoscientists
- Consistency of MIT behaviour in the performance of their work, noting positive or negative trends
- The impact the MIT had on the organization and the people involved
- Further detail the MIT missed (however MIT ideally adds that detail themselves)

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Role of Supervisor, continued

- Sometimes supervisor comments get the report approved

Examples of great supervisor comments:

- John's engineering skills have grown immeasurably over the past two years. He is taking on more and more responsibility.
- Jane has progressed enough in her career to take on project management. I am confident in Jane's abilities to be the main client contact.
- Jack has contributed to projects being successfully completed within budget.
- Joanne realizes that social implications are a key component of geoscience. She realizes that every project needs to be approached with these in mind.

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Role of Supervisor, continued

Further examples of great supervisor comments:

- Further to the above, the testing was actually a series of field trials and were readily adopted as the engineering practice related to drill and blast pattern layout. These design changes effectively reduced dilution and improved ore recoveries
- Jack realizes that time wasted due to damage to equipment can often outweigh the optimal design on paper due to field imperfections or non-ideal conditions
- Jane is outstanding technically and continues to be a recognized leader. She also directed time studies and the collection of vital data to improve mine planning and scheduling as well as equipment selection

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Role of Supervisor, continued

- It is NOT the supervisor's role to write the report but suggestions for improvement are encouraged and second and third drafts written as experience report writing is a learning opportunity too.
- It is up to the supervisor (or mentor) how much feedback they provide – the more the better.

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Role of Mentor

- When the supervisor is not a P.Eng. or P.Geo. (registered anywhere in Canada), P.Eng. or P.Geo. "mentor" required
- Provides a recommendation as to whether or not the experience is acceptable engineering or geoscience as per definitions from the Act and Guidelines 2 (eng) or 3 (geo)
- Mentor for experience review purposes may or may not be your "career" mentor
- Note: no opportunity for mentor arrangement with pre-grad experience credit

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Role of Mentor continued

- Meet with MIT as required
- Involve supervisor if deemed necessary
- Experience review and signature from supervisor is still required (supervisor verifies description of the experience)

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Selection of a Mentor

Order of preference (section 4 of Exp Guideline 1):

1. P.Eng. or P.Geo. within the same company, ideally someone parallel to the supervisor. **Mentor does not have to work in the same office.**
 - Note – a P.Eng. or P.Geo. above is the second supervisor, not a mentor
2. P.Eng. or P.Geo. who works for a different company but does work with your company.
3. P.Eng. or P.Geo. who is a former or current colleague.
4. P.Eng. or P.Geo. that you know through other means
5. APEGS list of volunteer mentors

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Selection of a Mentor

- Mentor Approval form – if you find the mentor yourself
- Mentor Request form – if you need us to find a mentor for you from our list of volunteers
- “Agreement of Understanding” sent to you and the mentor.
 - Sign and return to the APEGS office (separate copies OK)

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Experience reporting keys to success

– Supervisors / Mentors

- Complete comments electronically if possible (also allows you to utilize the hyperlinks for information items in the forms)
- Don’t forget to initial / sign each page after printing
- Sign Summary Evaluation even if it’s not Final Report
- Supervisors and Mentors may send the report directly to APEGS if they wish (MIT signature on first page can be obtained later)

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Experience reporting keys to success

– Supervisors / Mentors

- Consider comments non-optional, even if it simply reinforces that work described is accurate.
 - Feel free to augment info provided by MIT in the report OR send back to the MIT for revision.
 - Goes a long way in eliminating any questions or uncertainty of the Experience Review Committee
- Expedites review of reports

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Examples

- The appendices in Experience Guideline 1 contains examples from various disciplines

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“Academic Review” cases


- Applies to:
 - International grad – EIT and GIT applicants
- Not an EIT or GIT yet
- Assigned confirmatory exams
- Given experience review option to waive exams
 - Appears to have 5 years of experience on resume
- Submit **5 years** of experience
- Follow all the same guidelines and use the same forms as EITs and GITs

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Report Summary Form


- Filled out each time you submit a report
- Chronological order
- Include all experience to date that you plan to submit even if it has not been submitted yet – with every report
- Date format – common problem with mm/dd mixed up or doesn’t match throughout the reports – double-check all these.
 - A report cannot go to the committee if dates are inconsistent.

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So I have Finished the Report Now What?

- Do a Self Audit.
 - Proofread Spelling & Grammar
 - Confirm ALL Member in Training Sections filled out Correctly.
- Give the Report to Your Supervisor/Mentor To Fill in Feedback & Sign-off on.
- Audit the Supervisors Sections.
 - Confirm ALL Sections are Filled out Correctly and ALL Signatures and Initials have been made.
- Submit the Report.


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Procedural Mistakes

- Approximately 60% of reports have at least 2 errors that prevent them from being reviewed.
- Reports with mistakes are held while the member in training makes corrections to the report.
- Reports that are being held for procedure are stored in:


“THE DRAWER”
- The Committee does not see reports in the drawer, until the corrections are made!

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Top 5 Errors that will land your Report in “THE DRAWER”


1. Signature or Initials Missing.
 - Either from Member in Training or Supervisor
2. Number of Months Credit not Filled out
3. Electronic Signature
 - They are not allowed, Sign in Ink only.
4. The supervisor has not filled in all required sections.
5. Supervisor has not filled in Part 6 – Satisfactory Progress

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Bonus Procedure Error

- Not everyone needs a mentor.
- Members in Training often apply for one when it is not required.


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Feedback

- Experience reporting process is always evolving and improving. Your feedback is valuable.

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Eligibility to write the PPE

- Must be registered as a member-in-training in good standing
 - Also need this in order for APEGS to review experience reports
- At least one post-bachelors report submitted to APEGS completed in full (does not have to be approved yet) by the PPE application deadline

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Contact Information

- All registration info under “Apply” on website
- Presentation posted under Apply, Work Experience Reporting

Phone: 306-525-9547 or
1-800-500-9547

Website: www.apegs.ca

E-mail: apegs@apegs.ca

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