Ipsos Public Affairs

C-502-Plenary - i.
Appendix D

Professional Engineers Ontario

Survey of Members on Continuing Professional Development

Professional Engineers Ontario

JULY 2015

GAME CHANGERS

Ipsos

Background

In March 2014, PEO Council created the Continuing Professional Competency, and Quality Assurance Task Force to investigate options and prepare a plan for a comprehensive program of continuing professional development and quality assurance. The Task Force's mission was reinforced when Commissioner Belanger of the Elliot Lake Inquiry recommended that PEO "should establish a system of mandatory continuing professional education for its members as soon as possible and in any event no later than 18 months from the release of this Report." The Task Force has developed the basic criteria for a novel CPD program centred on the notion of the potential risk to the public associated with an individual practitioner's work.

Ipsos was commissioned to conduct research among members to assist in tailoring a CPD program which mitigates the concerns of practitioners and contains messaging regarding the program that will drive support and compliance with such a program.

Objectives

Qualitative focus groups were conducted as a preliminary round of research to support PEO by:

- Gauging reaction to the CPD program as envisioned by PEO
- Helping to refine the content for the subsequent online survey
- Helping to refine the content for messaging and communication of the program

Methodology

Ipsos Ideation sessions were conducted to leverage on technology to mitigate geographical constraints of PEO members who span Ontario.

Three sessions were conducted on July 6th among a total of 29 PEO members from different regions of Ontario.

PEO members were recruited to include professional engineers from a wide variety of backgrounds including both practicing and non-practicing engineers.

Ipsos Ideation Sessions

Ipsos Ideation sessions leverage technology to facilitate brainstorming, integrated thinking and in-depth issue examination.

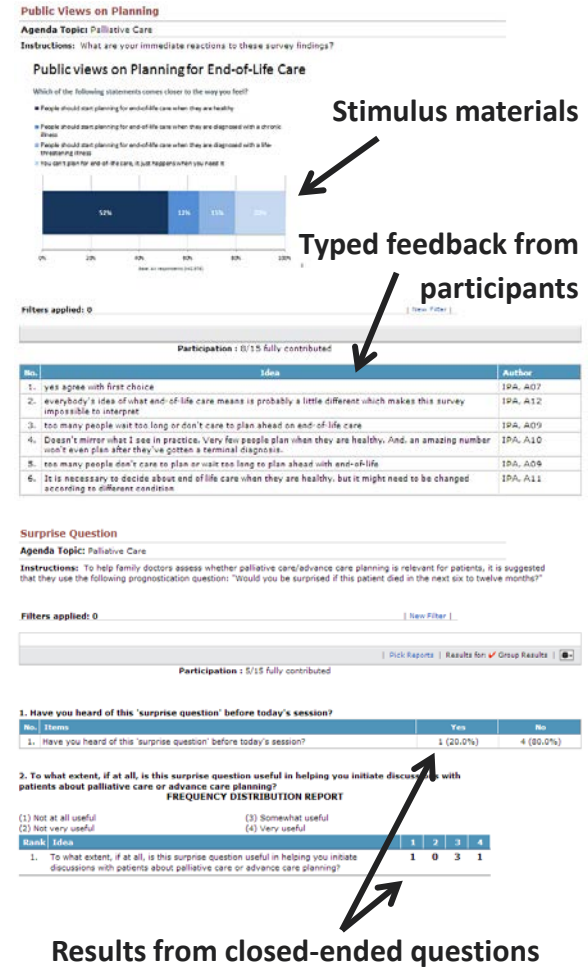
Participants take part in the sessions from their home/work location and through the Ipsos Ideation platform are asked to:

- Provide anonymous typed input to open-ended questions or select answers to closed-ended questions using a drop-down menu of responses.
- Review and react to stimulus materials and the responses of other participants.
- Engage in a verbal discussion (over a conference line) moderated by a qualitative researcher.

The primary benefit of using the Ideation platform for this project is that it provided an effective way of engaging Veterans from around the country including both urban and rural locations.

The raw typed outputs from the Ideation sessions are provided along with this report.

Screenshots of the tool



TOP OF MIND THOUGHTS AND EXPECTATIONS

PARTICIPANTS WERE INITIALLY ASKED BROAD QUESTIONS TO GAUGE THEIR THOUGHTS ON CONTINUING PROFESSIONAL DEVELOPMENT IN GENERAL, AND EXPECTATIONS OF A PEO CPD PROGRAM.

Continuing Professional Development brought out a variety of top-of-mind thoughts

Overall participants' immediate reactions to Continuing Professional Development were positive. Engineers want a program to show they have stayed up-to-date on current issues and regulations.

The main concerns engineers had were that a CPD program for engineers was perceived to be hard to standardize and onerous in terms of time and cost for both engineers and employers. Others mentioned that implementation would be key to any CPD program's success.

These top of mind thoughts continued to be discussed throughout the session and provide a snapshot of what engineers would want to see in communications regarding a new CPD program.

- CPD should be mandatory for all engineers
- Important for engineers to stay up-to-date
- Good for introducing new regulations
- Good idea, but good implementation is the key to success
- Difficult to standardize
- Should not be overly onerous on the engineer or employer

PEO members had some high level expectations of a CPD program

The CPD should be flexible on the whole to allow the broad spectrum of engineering fields to participate, while being specialized to provide useful and relevant training to engineering discipline.

The CPD should take engineer input into consideration to ensure courses are specialized enough to provide useful and relevant training tailored to each engineer's needs.

The CPD should include some form of accreditation for completing relevant courses as a value add for engineers. This could also help assure the public and employers that a P.Eng is an active practitioner.

The CPD should include online or web-based elements to accommodate schedules and encourage self-learning.

> I would like to see courses that are really relevant to my particular engineering work, the type of knowledge that I find myself searching for from manufacturers, AHJs, distributors, etc. in order to keep relevant in my industry.

> 1) It needs to be web based, 2) User friendly, 3) it needs to be based on matrix that uses input from the engineer.

GUIDING PRINCIPLES FOR A CPD PROGRAM

PARTICIPANTS WERE PROVIDED WITH AN ABRIDGED VERSION OF THE GUIDING PRINCIPLES TO REVIEW DURING THE SESSION.

Reactions to the Guiding Principles were largely positive though reception of the program hinges on the details

Understanding that more detail would be provided with the introduction of the program itself, participants reacted positively to the principles.

Engineers mentioned they liked the focus on relevance to the engineering services they provide (#2), the ability to design their own tailored program (#4), and scaling the requirements based on the engineering services' risk to the public (#5).

However, some mentioned they had issues with the underlying assumption that CPD was applicable to all engineers, while others mentioned the inherent problems with monitoring and evaluating a program as diverse as the CPD would need to be.

A few also questioned the need for a program at all. These participants mentioned the need to understand the underlying problem the CPD program was developed to mitigate.

> PEO should not rely on a one size fits all CPD approach as done in other provinces. A single all-encompassing CPD program would be either too onerous for some members or watered-down to meaninglessness for others.

> Any program must treat practicing and non-practicing engineers differently as their requirements are different. The same is true for practicing engineers that have different levels of risk associated with their work.

> I do not think professional development is even applicable to some engineers that do not offer services to the public. It is not applicable if the field of knowledge that the engineer works in has not changed.

> Effectiveness of a diverse program is next to impossible to monitor and to evaluated without extreme pain to its members.

Many felt some key details left them with a positive impression of the guiding principles

Several key details from the Guiding Principles were important to engineers as they showed PEO understood the various needs of the industry and that the key responsibility of engineers was to public safety.

REQUIREMENTS RELEVANT TO ROLE

Engineers were encouraged to see a principle regarding relevance to an engineer's role.

- Participants felt it only made sense to make the program relevant.
- Some also felt the principle showed PEO recognized that not all industries have the same needs.

INDIVIDUAL PROGRAM DESIGN

Engineers felt it was important for a CPD to be able to be tailored to fit an individual's needs and specialization.

- They felt a one-size-fits-all approach would not be successful based on the broad range of services provided by engineers.
- This would work well for those doing specialized work, and those in non-practicing positions who could select only courses relevant to them.

ETHICS & PUBLIC SAFETY

In general engineers felt through better training they could fulfil their mandate of protecting the public.

- While not all engineers interact directly with the public, many do service the public in one way or another.
- A program would also show the public and employers that license holders are active practitioners with public safety in mind.

RECOGNITION

Some form of recognition for completing elements of a CPD were seen as important to engineers.

- Recognition in the form of an accreditation was mentioned as a good return on investment.
- This was seen as a way for employers to clearly see if a prospective engineer was a licensed practitioner and up-to-date on regulations.

Participants mentioned some issues where they require additional details

Some participants had questions regarding different issues raised during their review of the Guiding Principles.

While most felt positively towards the Guiding Principles in general, their acceptance of a program would require more information from PEO about certain key points of the program:

BROAD SPECTRUM OF ENGINEERS

Perception from engineers was that the program would have a difficult time encompassing all engineering disciplines as the field is so broad.

- This was especially relevant to those who do not specifically practice engineering in their role.
- PEO would need to show the breadth of the program when introducing it to members

MONITORING & EVALUATING THE CPD

Some were concerned that monitoring the program would be too onerous based on the breadth of fields covered by the CPD.

- PEO would have to outline who would monitor and evaluate the CPD.
- In addition, consequences for misrepresentation would need to be disclosed.

IMPLEMENTATION

Participants had issues with how the program would be implemented. Without details in the principles, participants were left to speculate on when, how, and who would lead the implementation.

- They were also looking for details about what courses or work would qualify under the program.
- Participants expect an implementation plan and timeline to be communicated to them by PEO.

MANDATORY

Many engineers felt the program must have mandatory components to it to ensure uptake by all members.

- A few mentioned that not all aspects should be mandatory, only those relevant to the engineer's role and needs based on the risk assessment.
- PEO communications should include which aspects of the program would be mandatory.

Though participants agreed a CPD program should be *mandatory*, the term caused confusion

The issue of a mandatory program had been contentious in past PEO discussion regarding CPD programs for engineers.

During the sessions, engineers mentioned they felt program should be mandatory for professional engineers to ensure uptake. To many this included non-practicing engineers assuming the program could be tailored to offer some value to them.

Some participants assumed a 'mandatory' program meant PEO would determine which courses they would be required to complete. These engineers stressed they did not want PEO to dictate the program and reiterated that it should be tailored by the engineers and the engineering industry based on their needs.

A few mentioned that for them, mandatory meant the program would be tied to their designation as a professional engineer and mentioned they would expect the program to be part of the license renewal process.

PEO should look to outline how the program would be mandatory for professional engineers to clear up any misconceptions.

It cannot be voluntary, if there is a program it should be mandatory. Non practicing engineers should not opt out of this.

If it's going to go ahead, it must be mandatory. If you don't comply, you can't maintain your designation.

The spectrum of engineering is too broad to apply a set number of mandatory courses. Industries and manufacturers should have ability to create CPD courses specific to their needs to train engineers in their industries.

COMMUNICATION OF THE PROGRAM

PARTICIPANTS WERE ASKED HOW THEY EXPECTED THE PROGRAM TO BE INTRODUCED TO THEM, AND WHAT FACTORS WERE IMPORTANT TO COMMUNICATE.

Expectation is for PEO to first communicate through Engineering Dimensions, then in-person

Participants felt the program should, and would be communicated first using the professional engineering newspaper, Engineering Dimensions, followed by receiving documents from PEO both in hardcopy and softcopy. By using multiple mediums, PEO members will learn about it in the format they prefer.

Within Engineering Dimensions, engineers expected to be provided with an outline of the program along with more information about how and when the program will be introduced, and how members can expect to receive more information.

Some expected PEO to set up in-person presentations through their local chapters to provide more details. Some expressed interest in Q&A sessions for members at the local chapters. A few also mentioned on-line information sessions and webinars to cater to larger geographical areas.

There were a few mentions of giving members a chance to vote, however this was caveated by saying they did not want to vote if the decision had already been made regarding the program.

> The written document should be mailed in paper format as well as emailed to answer to the preferences of as many engineers as possible.

> It needs to be provided in a multitude of media from mailed documents to e-mails to on-line information sessions.

Engineers expected to hear about 5 key aspects of the CPD program

Participants outlined the information they would want PEO to communicate to them regarding the CPD program.

The problem addressed by the CPD program - Participants were adamant that unless the CPD program answers a specific problem in the industry, then they do not see a benefit in the program as a whole.

The specific objectives and goals - An outline of the objectives that meet the varying needs of all professional engineers affected by the program.

Implementation plan - Including who will implement it, how courses will be determined, which courses qualify as CPD, what aspects will be mandatory, who will monitor program, and whether or not the program will be tied to their licence renewal.

Cost - Outline the monetary and time cost to the engineer as well as to their employer as some participants felt they would need to justify their participation in the program.

Expected outcomes of the program - Potential outcomes for the engineer focused on accreditation and professional development. Outcomes for employers and the public focused on the knowledge that an engineer is a current practitioner and up-to-date on regulations and issues.

> The PEO needs to figure out what the problem is. PEO needs to convince its members why we need to adopt a CPD program.

> The implementation of such a program will require a lot of input from the members. Who better than them know what can benefit their career path.

Summary

From the qualitative sessions conducted in July, the sentiment from engineers regarding a CPD program are cautiously positive.

While the idea and Guiding Principles behind that program leave a positive impression on members, the details and execution remain the most important measure of success.

PEO should look to communicate the 5 key aspects of the CPD program to members using Engineering Dimensions and the individual chapters are podiums to reach all Ontario based engineers.

Based on the qualitative findings, communications focused on the problem and how the program will impact public safety stand a good chance at convincing more members of the value of the program.

Next Steps

While the qualitative survey provided feedback on the Guiding Principles overall, as well as what members want to know more about when it comes to the proposed CPD program, more input from the larger member is required.

A quantitative survey has been prepared to gauge the reaction of a larger proportion of the PEO membership towards the Guiding Principles.

The quantitative survey will look to understand member's opinion on each principles':

- Clarity
- Fairness to members
- Ability to lead to better protection of the public
- Ability to lead to improved public confidence in the profession

In addition, the survey will gauge member support for each principle individually as well as the CPD program overall.

Members will also have an opportunity to review the extent to which the principles adequately communicated several messages. This feedback will help to narrow down what other information the diverse group of engineers require.