Information and Communications Technology Skills

IAESB TASK FORCE RESEARCH

Online Survey Analysis | January 2018
Version 1.2

Executive Summary

Increasing use of technology is affecting how professional accountants operate in the workplace and the nature of the services they provide. These changes have the potential to affect the knowledge, behaviors and skills professional accountants require in order to be able to perform their roles successfully.

The Information and Communications Technology ('ICT') Skills Online Survey Analysis Report ('Report') provides a 'snapshot' to stress-test drivers of change, curricula development, areas of focus and options for International Accounting Education Standards Board™ (IAESB™) standard setting development or support activities.

Headlines from this Report include:

- a clear message from all types of respondents that technology is having a significant impact on accounting education;

- acknowledgement that an increased awareness about new and emerging technologies must be partnered with a range of other skills, such as interpretative, analytical, ethical, change management and data handling skills; and

- support from the majority of respondents for a range of standard setting development activities, including provision of guidance, to address the changing skillsets needed by accountants, both now and in the future.

Further information and findings from the ICT Skills Survey are discussed in detail below. Many thanks to all survey respondents for their participation in this integral information gathering activity to inform the work of the IAESB.

Background and Introduction

The IAESB is an independent standard-setting body that serves the public interest by establishing standards in the area of professional accounting education that prescribe technical competence and professional skills, values, ethics, and attitudes. Through its activities, the IAESB enhances education by developing and implementing International Education Standards™ (IES™), which increase the competence of the global accountancy profession—contributing to strengthened public trust.

As described in its 2017-2021 Strategy and 2017-2018 Work Program, the Board is focused on enhancing the professional competence and the evolution of the knowledge, skills, and behaviors needed in ICT by professional accountants. Planned project activities include developing an inventory of skills based on stakeholder's consultations through surveys, in-depth interviews, and a literature review and performing an analysis to determine if the IESs are fit for purpose. Based

on the strength of the evidence obtained through its consultation activities, the IAESB will decide how to address gaps identified, if any.

The ICT Skills Survey (the 'Survey') was conducted by the IAESB during June-July 2017 and was designed to provide responses to a series of questions posed to a range of stakeholders by the ICT Skills Task Force (the 'Task Force').

The Survey process focused initially on two distinct audiences – IFAC Member Organizations accounting education contacts and a 'General' Survey which was open to anyone to complete. In terms of distribution:

- The targeted IFAC Member Organizations Survey was sent to known IFAC Organizations accounting education contacts on June 27, 2017[1].

- The general survey was sent to the IAESB contact database on July 6, 2017 and was advertised through the September IAESB e-News edition[2].

A copy of the Survey invitation email can be found in Appendix 1.

Before analyzing the responses, the Task Force cleansed the data to exclude test data, duplicate responses or responses which were substantially incomplete. As a result, the number of responses to the two main Surveys was as follows:

24	*Targeted IFAC Member Organization respondents*
190	*General respondents (open to all)[3]*

An additional survey was shared (in hard copy) with representatives who attended IAESB outreach activities as part of a conference in Vienna, Austria (June 2017). These activities were sponsored by the World Bank's Centre for Financial Reporting & Reform - STAREP[4] project. Representatives of STAREP organizations provided 19 responses. Although not part of the main Surveys, a number of similar questions had been posed to this group and have been included, where relevant, in this report.

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[1] The targeted IFAC Member Body Survey was distributed to 470 individuals belonging to 175 IFAC members and associates.

[2] The general survey was distributed to 16,986 individuals registered with for IAESB's publications and communications.

[3] Note: a number of respondents to the General survey indicated that they worked for IFAC Member Bodies. The Task Force has not reallocated the responses from these individuals to the targeted IFAC Member Organization Survey – on the basis, that these individuals chose which survey to respond to and may not want their responses to be 'Member Organization' responses.

[4] Strengthening Auditing and Reporting in the Countries of the Eastern Partnership (STAREP) is a regional program of the World Bank Centre for Financial Reporting Reform (CFRR), which supports the development of transparent policy environments and effective institutional frameworks for corporate reporting in Eastern Partnership countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine.

Structure of Reported results

Throughout this report, the results from the targeted IFAC Member Bodies and General Surveys have been presented in parallel.

Part A of the report provides general background information about the mix and types of respondents who took part in the Surveys.

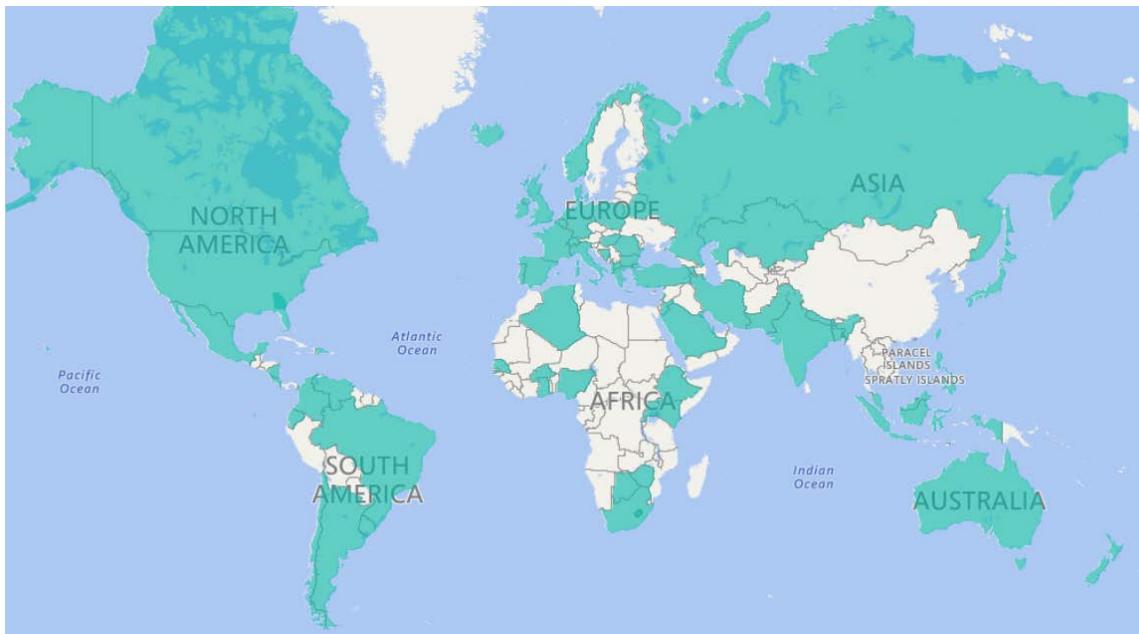Part B of the report addresses the objectives of the Surveys in order to:

1. Obtain validation for initial Task Force areas of consideration and the approach to identifying 5 focus areas;
2. Receive preliminary input on the potential areas of focus and standards-setting development or solutions;
3. Investigate detailed comments; and
4. Identify individuals or organizations willing to participate in future outreach efforts.

![IAESB logo]

Part A: Respondent Background Information

Respondents to the **General Survey** were geographically dispersed with a number of regions well represented:
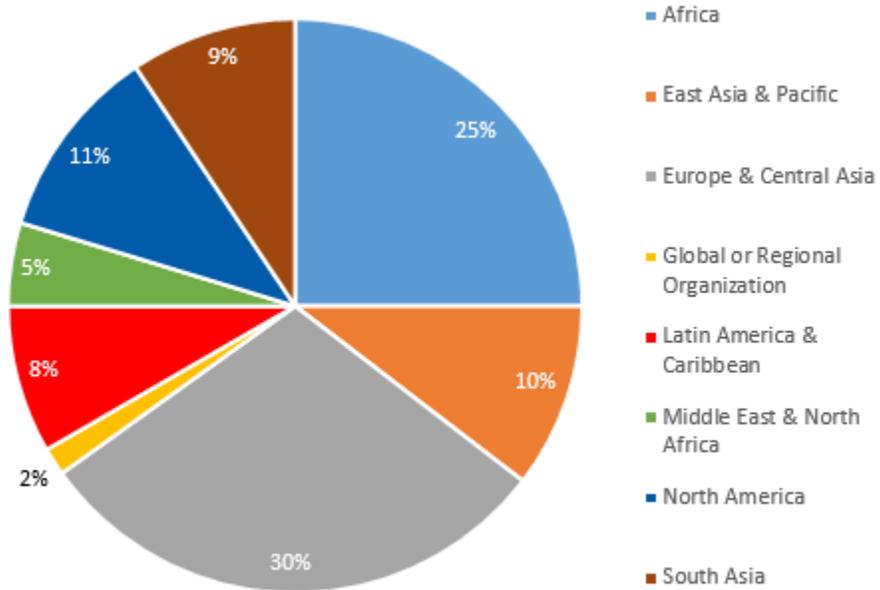

The following countries (shaded in green) were represented in the General Survey responses:

Individuals taking part in the General Survey identified their organizational affiliation as follows, demonstrating a good spread of participation from a range of academic, accounting firm and IFAC member organization categories. A high number of individuals answered in their own capacity as well

The mix of current roles was further analyzed using the word-cloud below – and include a range of respondents from partners to business owners, accounting students to faculty staff:

Respondents to the **IFAC Member Organization Survey** were from the following geographical regions[5]:
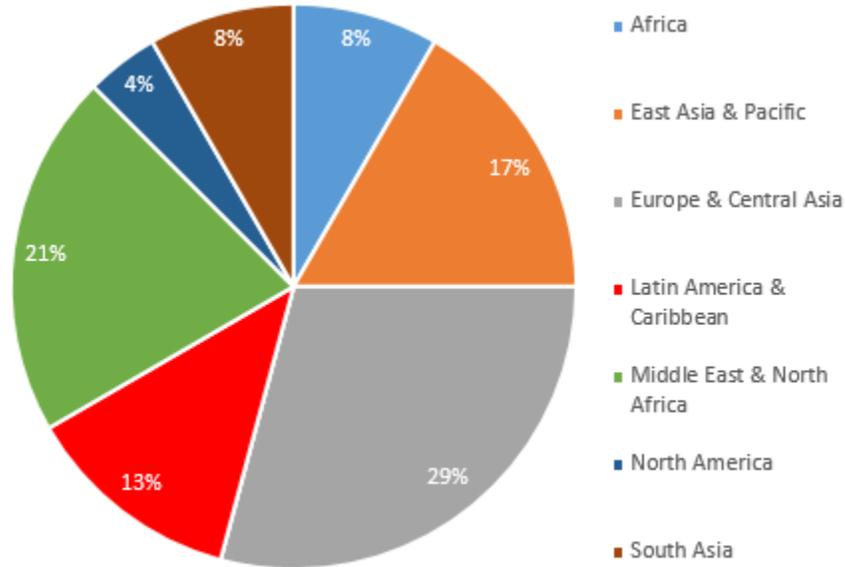

Respondents to the IFAC Member Organizations Survey had a broad range of roles ranging from CEOs to Managers and a range of individuals with direct responsibility for learning and assessment.

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[5] In order to preserve anonymity of the respondents to the IFAC Member Organization Survey a country analysis has not been provided.

STAREP participants are based in Eastern Europe and came from the following organizations or professional backgrounds:
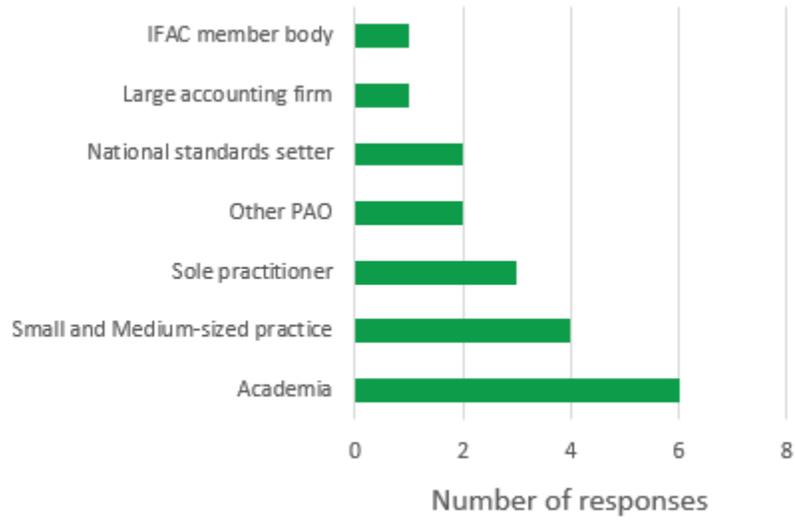
Part B, Section 1
Validation of initial Task Force areas of consideration

In order to gauge respondents' views on current ICT-based issues, a range of initial 'opener' questions were asked. The following table shows the number of respondents from each of the Surveys who 'agreed' with each question:

Question	IFAC Member Organization Survey[6]	General Survey	STAREP Survey
ICT skills "disruption" has the potential to affect all professional accountants performing a variety of roles	88%	94%	90%
Advances in technology pose a challenge to the existing ICT skills of our membership/organization	96%	92%	- [7]
The IAESB should consider ICT skills in the context of current and future skills needs	84%	96%	95%
ICT skills consideration needs to focus on Initial Professional Development (IPD) of aspiring professional accountants _and_ Continuing Professional Development (CPD) of professional accountants	84%	94%	84%
ICT skills includes an understanding of different technology platforms (software and hardware) and how the use of technology impacts the professional accountant's role	92%	94%	89%

Nearly all types of Survey respondents supported the assertions being put forward by each of the opener questions.

Due to the relatively low number of respondents in the IFAC Member Organization and STAREP Surveys (although they showed similar overall levels of support compared to the General Survey), they were disproportionately affected by only 1 or 2 respondents providing a 'no opinion' or 'disagree' response.

In a second series of questions respondents were asked to rate (on a scale of 1-5, with 5 being the most important) a series of ICT-related Focus Areas, currently and in the future. Each of the 5 Focus Areas contained specific elements to indicate the type of ICT knowledge, skills and behaviors (collectively referred to as skills) needed in ICT. The Focus Areas include: Business

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[6] In the IFAC Member Organization survey respondents were specifically asked about their organizations' views/perspectives.

[7] This question was included in the General and IFAC Member Organization surveys after the STAREP survey had been distributed.

acumen, Behavioral competence, Digital technologies, Data interrogation, synthesis and analysis and Communication and are outlined in more detail in Part B of this report. The following results emerged.

For **General Survey** respondents – all 5 Focus Areas were deemed to be important, both now and in the future, with General Survey respondents indicating the largest increases in 'Future Importance' categories of 23% (Business Acumen) and Digital Technology / Data Interrogation (both at 21% increase).
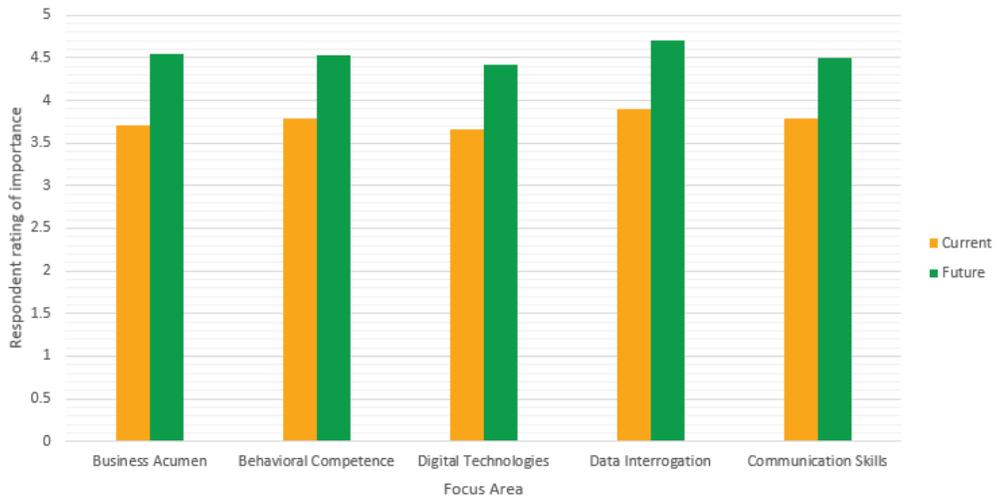

IFAC Member Organization responses, in terms of the current and future importance of focus areas, were similar to those of General Survey respondents. The largest increase in a 'Future Importance' Focus Area for this particular group was the Data Interrogation category (increase of 24%).
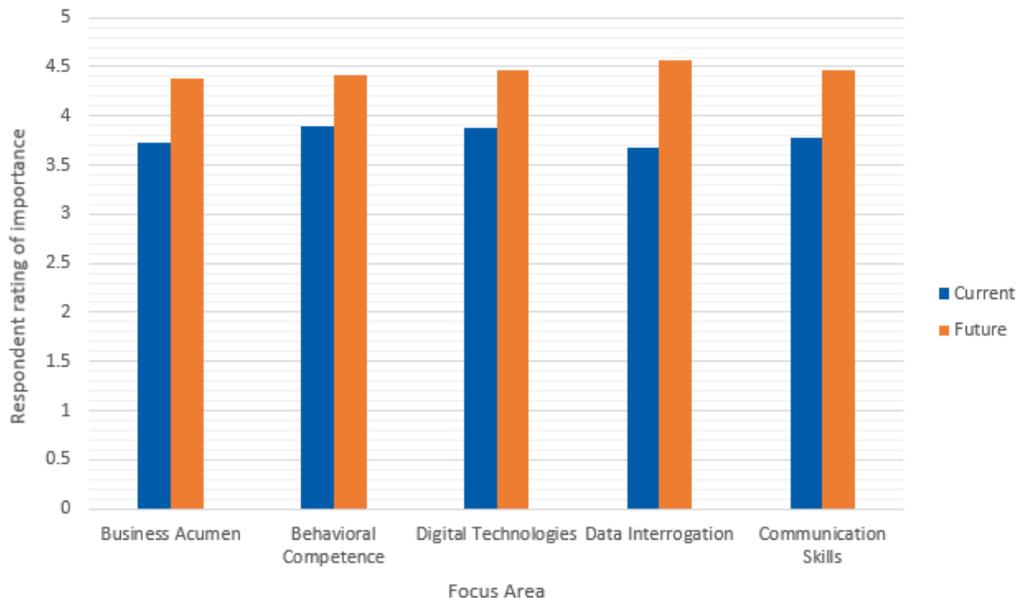
Overall, and even with quite different rates of response, both main Surveys indicated remarkably similar levels of support for the 5 main Focus Areas identified in the Survey.
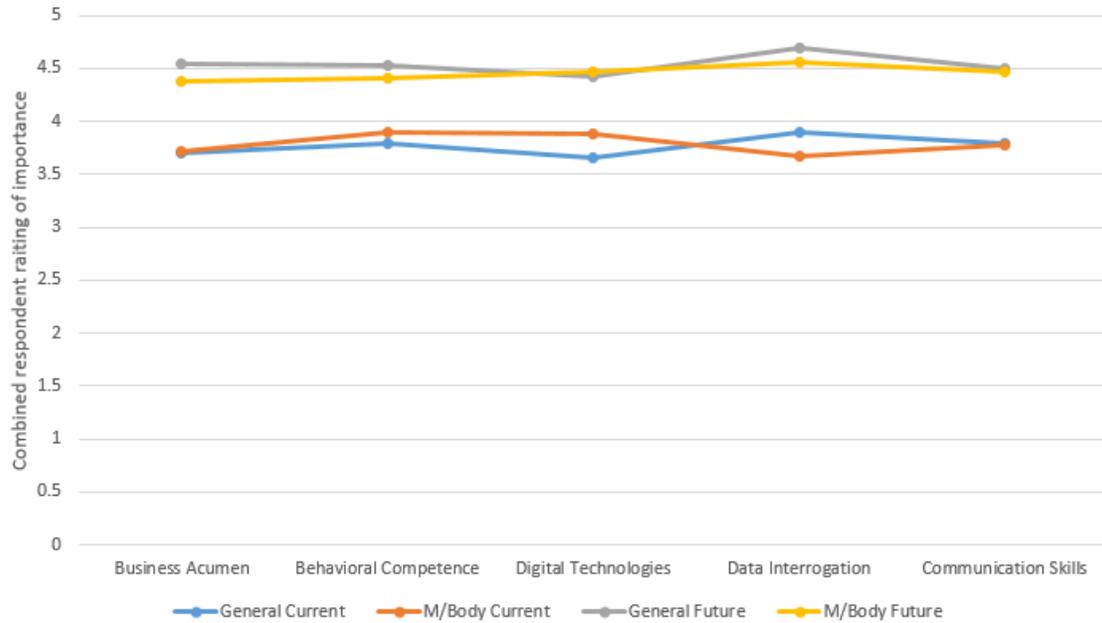
Respondents who were involved in development of learning outcomes, competency frameworks, curricula or CPD activities were asked whether their organization had updated these aspects of accountancy education in order to take into account new and emerging ICT Skills. Of those that responded to this question, more than 60% recorded a yes response.
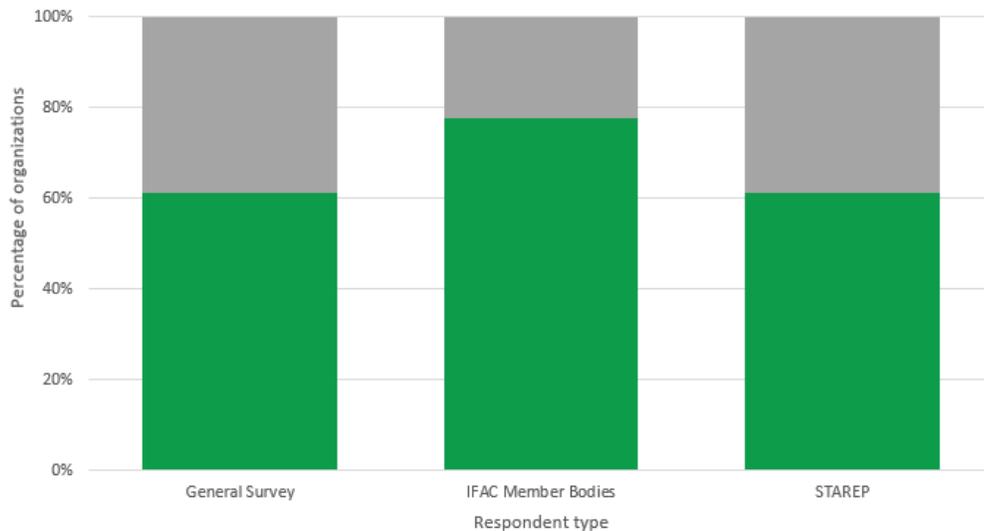
A summary of typical focus areas of updates is included below (items appearing in red were highlighted by respondents multiple times):

General Survey	IFAC Member Bodies	STAREP Respondents
- Digital technologies - awareness - Data interrogation - Data protection - Cybersecurity - Data analysis - Data security/disasters - Automation of tasks - Data mining - Technology awareness - Audit data analytics - Training in ERP systems - Visualization tools - Big data	- Data interrogation - Data synthesis - Managing data - More focus on business acumen/skills - Cybersecurity - Data analytics - Cloud computing - Legal aspects of data usage - CPD courses focusing on technology - Impact of ICT for future of accounting - Potential use of Artificial Intelligence - Big data	- Digital technologies - Big data - Data analytics - Data visualization - Lifelong learning - Data interrogation - Data synthesis - Predictive data analysis - Skills to use IT - Data storage/cloud

Part B, Section 2
Input on potential focus areas content and standard-setting solutions

Respondents were asked if the 5 Focus Areas (see below) should be expanded to consider other areas.

	Focus Areas	Comments
1	**Business acumen(BA)**	Evaluating outcomes within the proper context; "asking" large amounts of data the right question to form business decisions and make judgments; increased risk when decisions are made with an incomplete understanding of businesses and related business models; better insight into the overall financial standing of a business
2	**Behavioral competence (BC)**	Professional judgment; intellectual curiosity; critical thinking; ethical use and dissemination of data; adaptability; change management; life-long learning in an area of rapid technological change
3	**Digital technologies (DT)**	Visualization tools; Enterprise Resource Planning systems; processing and flow of information; data security; IT governance; new and emerging technologies
4	**Data interrogation, synthesis and analysis (DISA)**	Data integrity (completeness and accuracy); Data that is relevant; understanding the "story" the data is telling; confirming historical outcomes; conducting predictive analysis; understanding exceptions to expectations
5	**Communication (C)**	Dissemination of information from and across systems and devices; use of social media; succinct articulation of relevant information and insight; using technology to communicate

While broadly supportive of the 5 Focus Areas, additional suggestions for further focus areas or content included:

General Survey	IFAC Member Bodies	STAREP Respondents
- New technology entities (i.e. FinTech) - Data security, ICT security - Data privacy - Governance of data - Artificial Intelligence, Automation, Blockchain, Bitcoins - Resilience, ability to change - Ethics – now and in the future - Analytic techniques, statistics training - Intellectual curiosity - Emerging technology and impact	- Use of Artificial Intelligence - General awareness of emerging technologies - Guidance to support less developed countries - Disruptive technologies (Blockchain, robotics, Artificial Intelligence) - Cybersecurity (broader than just data security) - Characteristics of large datasets, assumptions, quality, etc.	- New ethics in ICT environments - More involvement of financial analysis

Part B, Section 3
Investigate detailed comments

The General Survey was further analyzed below, by respondent group, to examine whether there were 'typical' themes emerging from role/organizational or regional locations. The suggestions are summarized below noting that:

- Where possible, each suggestion was categorized into one of the existing 5 Focus Areas
- Suggestions that did not easily fit into an existing Focus Area were marked with '(N)'
- Responses that occurred on multiple occasions are shown in red.

Role/Organizational analysis of additional Focus Area content

Academia	IFAC Member Organizations	Other Public Accounting Organizations
Cyber-currencies x 2 (DT) - Artificial Intelligence (DT) - Country perspective (accessibility & affordability) (N) - Internet of things (DT)	- Blockchain/FinTech (DT) - Artificial Intelligence (DT) - Data security (DT) - Data integrity (DISA) Change management x 2 (BC)	- ICT and risk issues, ethics of holding and using data (BA/BC) - Handling large data (DISA) - ICT trainer capacity (N)

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• Cyber/data security x 4 (DT) • Flow of data (DT) • Volume of data (DISA) • Data analysis (DISA)	• Automation, impact on accountants x 3 (BC) • Integration with micro & macro-economic areas (BA)	

Other/Personal Capacity	Regulators/Standards setters
• Data security (DT) • Data mining, machine learning (DT) • Include ICT in curricula (N) • Cybersecurity x 2 (DT) • Ethical use of data (BC) • Interaction between roles (BC) • Change management x 2 (BC)	• Understanding of ICT (BA)

Sole Practitioner	Large Accounting Firms	Small or Medium-sized Practice
• ICT trainer capacity (N) • ICT content in CPD x 3 (N) • Mobile applications (DT) • Data privacy, data ethics (BC) • Technology risks, data handing risks (BA)	• Country perspective (N) • Intellectual curiosity (BC) • How IT packages work (DT) • Interaction between roles (IT audit, FS auditor) (BC) • Change management (BC) • ICT and risk issues (BA)	• Different types of software (DT) • Include ICT in curricula (N) • Cloud computing (DT) • Handling client systems/data ethically (BC) • Blockchain (DT) • Cyber-currencies (DT)

Analysis of additional content for the 5 Focus Areas suggests consistent themes emerging across all the major role/organization categories (within the General Survey). These consistent themes included:

- Specific digital technology areas (crypto-currencies, Artificial Intelligence, Blockchain)
- Dealing with the concept of 'change' (whether that involved interaction between different roles, impact on the professional accountant, ability to cope with change)

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- Emphasis on handling of data (security, volume, privacy, ethics)
- It was also interesting to note that very few suggestions were made in the Communications Focus Area.

Many of these suggested items were captured at a high level by the existing set of Focus Areas. 'New' themes that emerged were related to the educational system or infrastructure of curriculum approach, and included:

- Capacity to deliver ICT training (number of qualified trainers, rapidity of change)
- Inclusion of ICT in aspiring professional accountant and professional accountant curricula (IPD and CPD) and in earlier education; and
- Impact of IT in terms of resources (i.e. national ability to have access/afford ICT elements).

Analyzing the responses by location did not reveal major emerging themes on a regional basis.

The overall number of responses (by regional grouping) in the general survey is shown here:
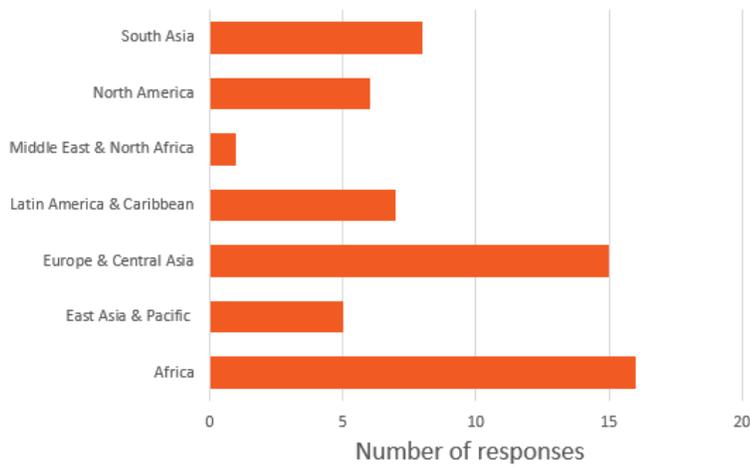
Regional analysis of additional Focus Areas content

The main differences associated with each region, or areas reinforced by respondents within a particular region, are shown below:

Africa

- Accessibility and affordability (i.e. national access concerns).
- Support for more CPD content (including mandatory content) and standardization of ICT skills/competency.

East Asia & Pacific

- Cyber-security, data privacy issues.
- Keeping up to date with technological changes/understanding impact of ICT.

Europe & Central Asia

- Impact and awareness of automation/emerging technologies – on roles, need for resilience, embracing or coping with change.
- Keeping up to date with technological changes/understanding impact of ICT.
- The increasing importance of data analysis.

Latin America & Caribbean

- Greater inclusion of ICT in curricula.
- Specific digital technologies were referenced.

Middle East & North Africa

- Impact and awareness of automation/emerging technologies.

North America

- Impact of new digital technologies.

South Asia

- Impact of new digital technologies (on roles and wider society).
- Specific reference to digital technologies.
- Capacity to deliver ICT skills learning.

Summary of responses provided:

- Respondents expanded on a number of elements of Focus Areas (i.e. suggesting specific technologies or reinforcing the need to cope/adapt to change)
- Some 'newer' responses that emerged were written from the context of specific education or national perspectives, and particularly:
    - ICT Skills/training capacity; and
    - Integration of ICT skills in CPD and IPD curricula.

Planned Changes by Respondents

The survey was keen to explore which Focus Areas and elements were already in the process of being included in revised competency frameworks, learning outcomes, training materials or CPD. As a result, we posed a question to ask if:

(a) Changes had been made to any of the above to take into account new or emerging ICT skills; and
(b) If changes had been made – which Focus Areas and elements had been affected or included?

Ninety-one respondents to the General Survey indicated they had made changes, with 85 providing further details.

Their responses are grouped first by type of activity, then by role/organization type and then analyzed based on geography.

Responses by type of current activity

Number of responses
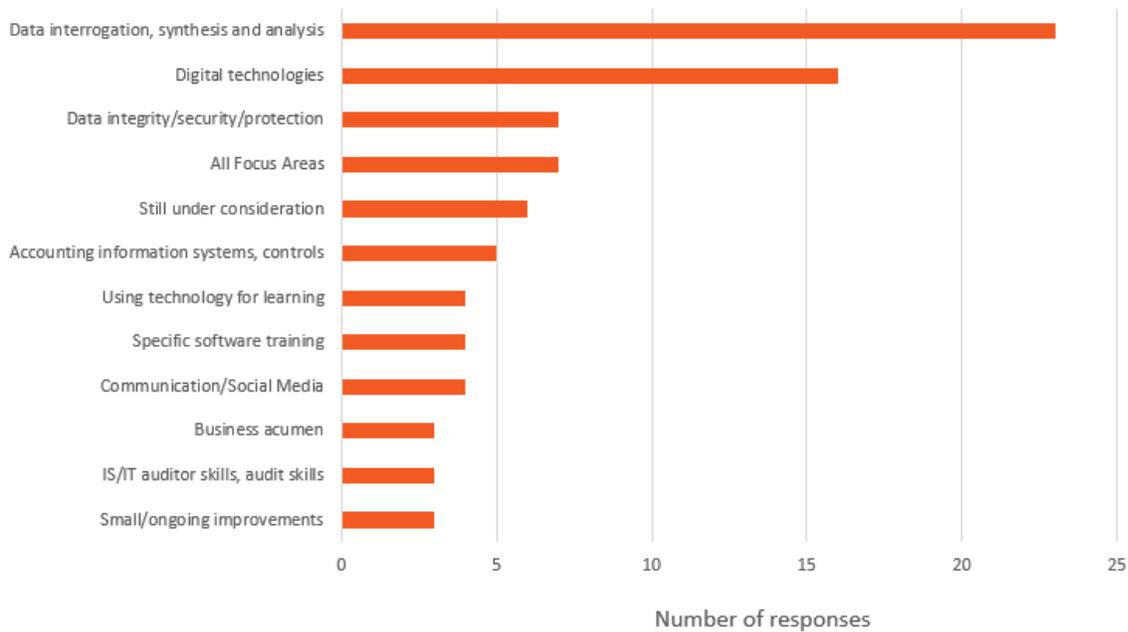
For those individuals who answered the General Survey and indicated they were planning to make changes in responses to ICT developments, the most common areas of focus were:
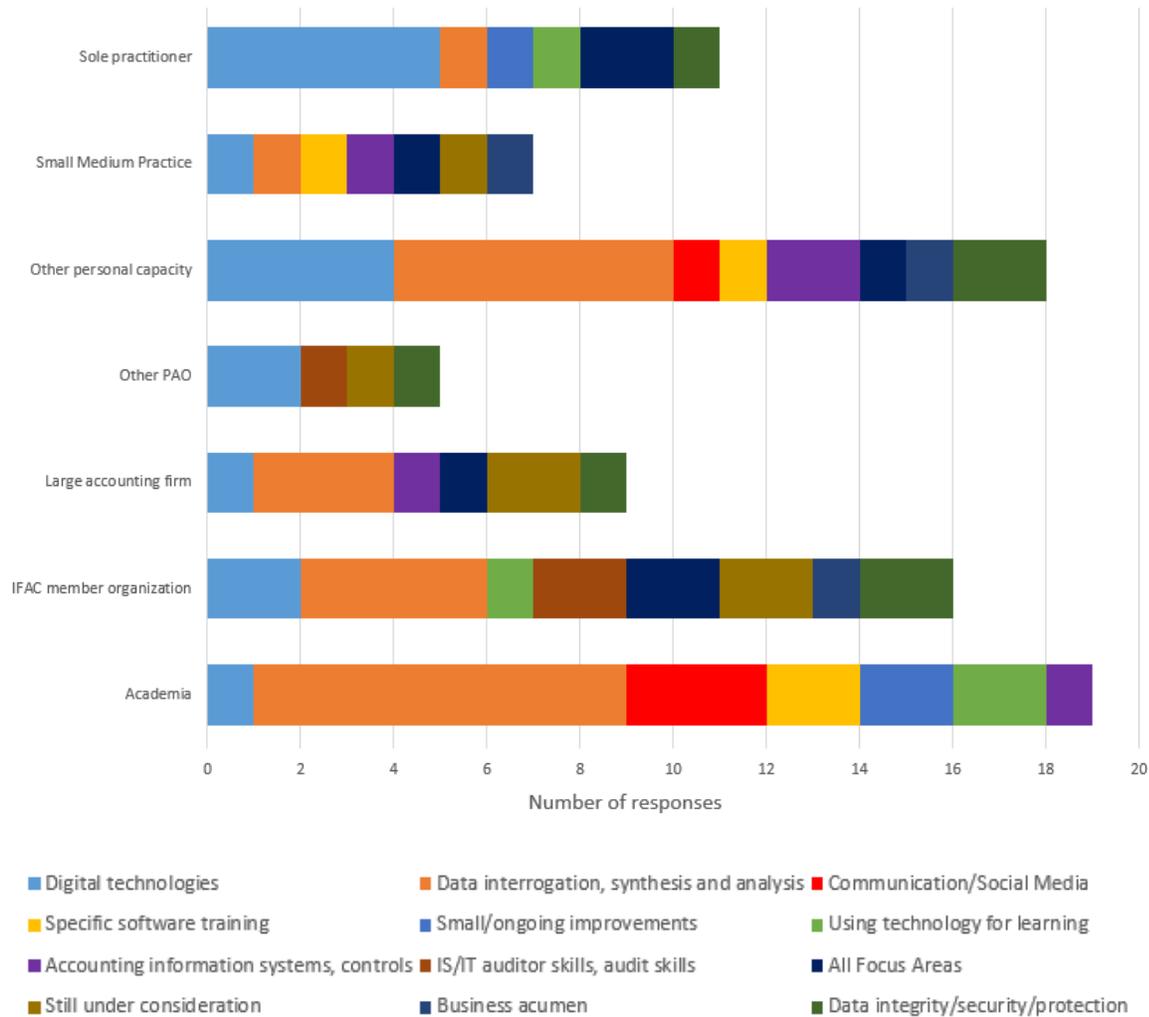
- Data interrogation, synthesis and analysis (data analytics, interrogating data using specific techniques);
- Exploring ICT based on emerging technologies (Blockchain, Artificial Intelligence, specific uses, automation); and
- Data integrity/security/protection (dealing with cyber-security threats, safeguarding the quality of data produced through ICT).

A large number of organizations indicated they had made changes to the 5 Focus Areas and elements identified through the Survey while 6 respondents also noted they were still in the early stages of considering planned changes ('still under consideration').

Some respondents identified specific areas of interest they had started to include based on their membership or organization. For example, several member bodies or accounting firms referred to the need to focus on specific services as a result of changes in ICT; others indicated that it is not just the content, but 'how' they were delivering training which was also changing through use of technology.

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Responses by role/organization

By focusing on responses based on role/organization, the following graph shows the distribution of proposed changes in ICT skills by the range of roles/organization types:

No new specific themes emerged from this analysis.

- While almost all (except 'Other PAOs') had a focus on data interrogation, synthesis and analysis, there was a relative difference in the importance of this among respondents – with a greater emphasis being placed on this by academia, large accounting firms and IFAC organizations.
- The ever-changing impact of new and emerging Digital Technologies was also important across all types of respondents but appeared to be more important to sole practitioners and those responding in a personal capacity.

Responses by region

A further review performed on the suggested types of planned ICT skills changes to determine whether they differed by region suggested:

- The mix of responses from each region did not identify particular patterns or specific areas of change on a regional basis.
- The proposed changes being planned for Digital Technologies and Data Interrogation, Synthesis and Analysis elements were spread evenly across all regions.
- Those respondents who indicated they would look at changes across all 5 Focus Areas tended to come from Africa and Europe & Central Asia regions.

Enabling Professional Accountants to Adapt to Change

One of the recurring themes during IAESB, ICT Skills Task Force and various outreach activities conducted to date, has been the extent to which Professional Accountants (and those aspiring to the role) can adapt, cope, embrace and work with changes in technology.

As part of the Survey, the following was asked: what are the: "…*skills that enable Professional Accountants to cope with advances or developments in technologies and/or changes in the way communication occurs".*

The following word cloud analysis has been generated from suggestions made by respondents to the General Survey.

Many respondents chose to repeat some of the Focus Areas already contained within the Survey, for example a high proportion indicated that Business Acumen and Data Interrogation, Analysis and Synthesis would be highly important to enable Professional Accountants to use ICT successfully and to understand the information produced by new and emerging technologies.

However, a number of newer themes emerged or highlighted elements mentioned in the original set of Focus Areas. These included an emphasis on:

- **Lifelong learning** – this was identified by a large number of respondents as being key to ensure that learning evolves as technology changes. A number of respondents linked this to relevant CPD and a willingness for Professional Accountants to acknowledge when they did not have the knowledge, it was their responsibility to seek out new learning opportunities or specialists.

- **Adaptability and Change** – these were two areas that were highlighted by a large number of respondents:
    o A high number of respondents noted that Professional Accountants should be 'willing' to change or adapt instead of just withstanding and coping with changes in technology (i.e. that they should be more proactive and positive in outlook).
    o Others highlighted that with rapidity of ICT evolution that some resilience and understanding of business systems, processes and controls would be equally as important.

- **Professional skepticism and Professional Judgment** – a high number of respondents cited these skills as being critically important to be able to cope with changes in technology and to fully understand the information and outputs from the ICT systems. Several cited the importance of being able to differentiate between relevant and irrelevant information/data as well as coping with volumes of 'big data'.

- **Critical thinking, problem solving and critical analysis** – a number of respondents suggested these are useful skills to cope with using and interpreting information generated by increasingly complex ICT systems and processes. Linking to professional skepticism and professional judgment, several respondents noted the importance of being able to challenge faulty information or suspicious data.

- **Intellectual curiosity** – this was raised by a number of respondents who noted Professional Accountants had to be prepared to acknowledge change generates opportunities for improvements in how they performed their roles – and this required individuals to be curious about technological advancements rather than just waiting for change to happen.

- **Ethical behavior relating to data protection awareness and integrity** – these were skills that a number of respondents highlighted were increasingly important as the value of data – particularly when being used by the Professional Accountant – would increase through use of technology. Several highlighted a need to update skills in areas of cybersecurity, data privacy/protection and ethical usage of data.

- **Emotional Intelligence and Communication** – this was raised by several respondents in order to highlight self-awareness on the part of Professional Accountants (whether that is from a learning & development knowledge 'gap' perspective or knowing when to bring in a specialist to support their own work); communication was highlighted as being important to enable Professional Accountants to network, collaborate with others and to explain the output from ICT systems and processes.

The written responses were then categorized (some into Focus Areas, others into consistent elements that emerged from the data). The overall level and mix of responses by region have been shown below:

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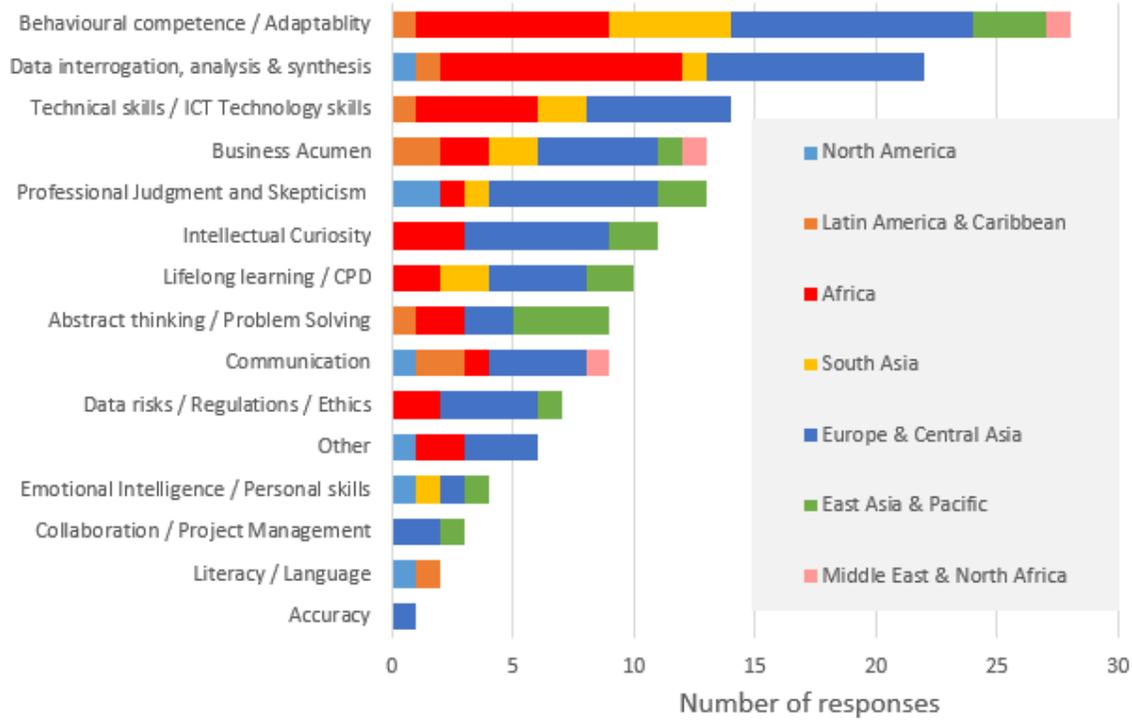
The Behavioral Competence and Data Interrogation, Analysis and Synthesis focus areas were notable for their strong support across a large number of regions. Several respondents specifically cited the 'willingness and attitude' to change as being a key element of Behavioral Competence.
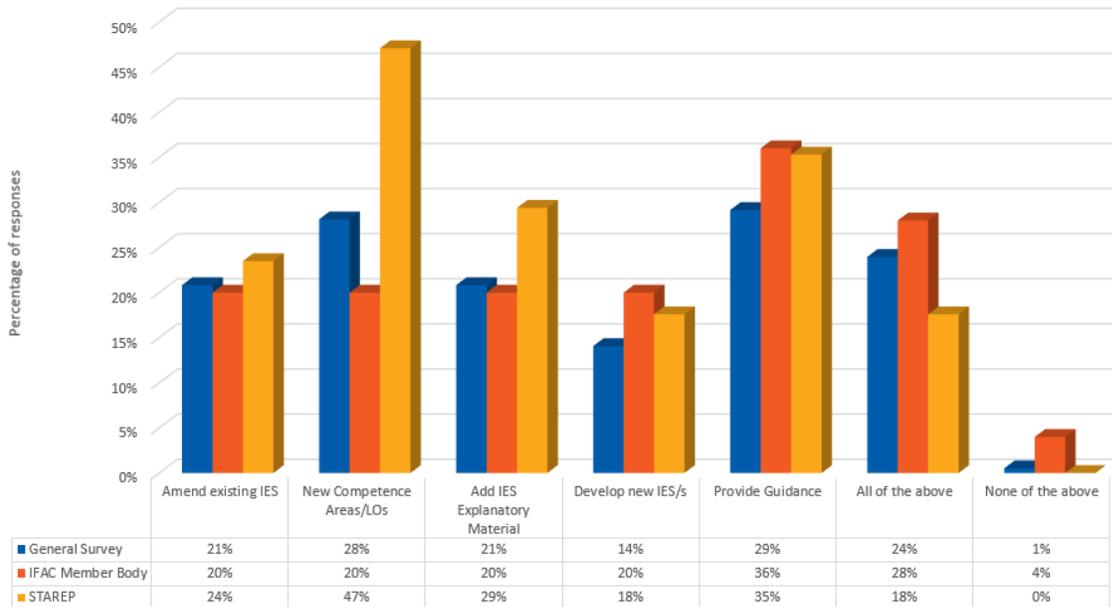
Analyzing the top 10 ICT skills/focus areas by role/organization indicates a fairly mixed pattern of responses – although Behavioral Competence (which included adaptability) had broad support across all areas (particularly in client-facing roles) with the notable exception of academia.
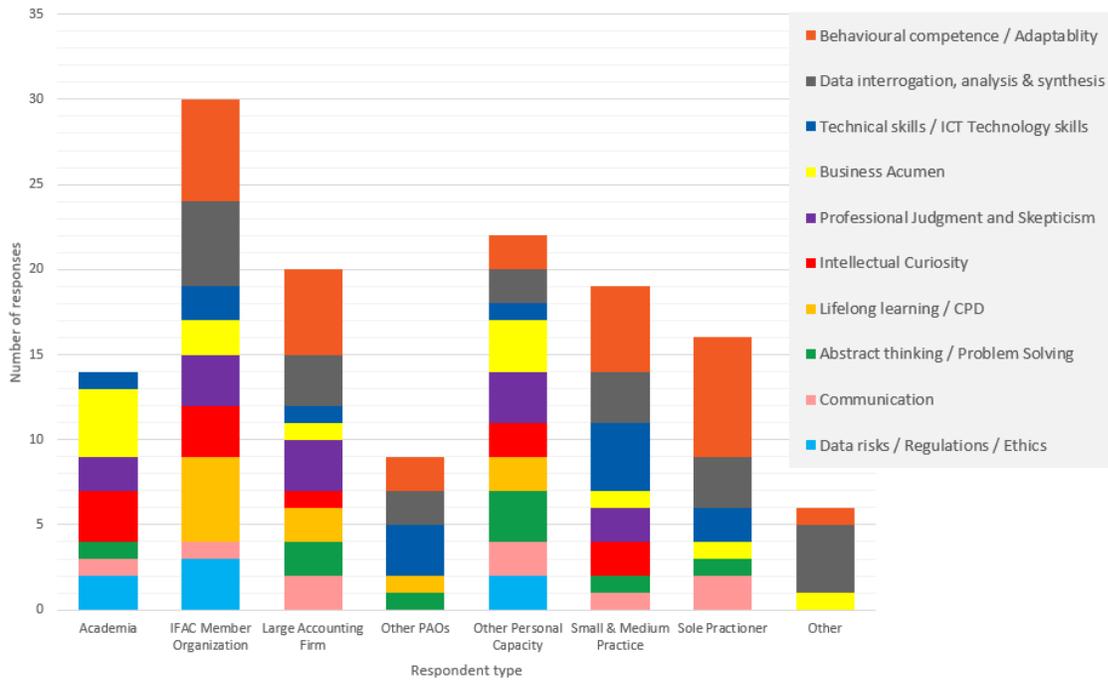
Respondents were asked to select, with multiple selections possible, standard-setting solutions that would be best to address the 5 Focus Areas identified in the Survey.[8]

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[8] In some instances individuals selected 'all of the above' and additional responses. In order not to overestimate support for specific types of standard-setting activities, where this was the case, the other responses were removed from those particular activities to avoid double-counting.
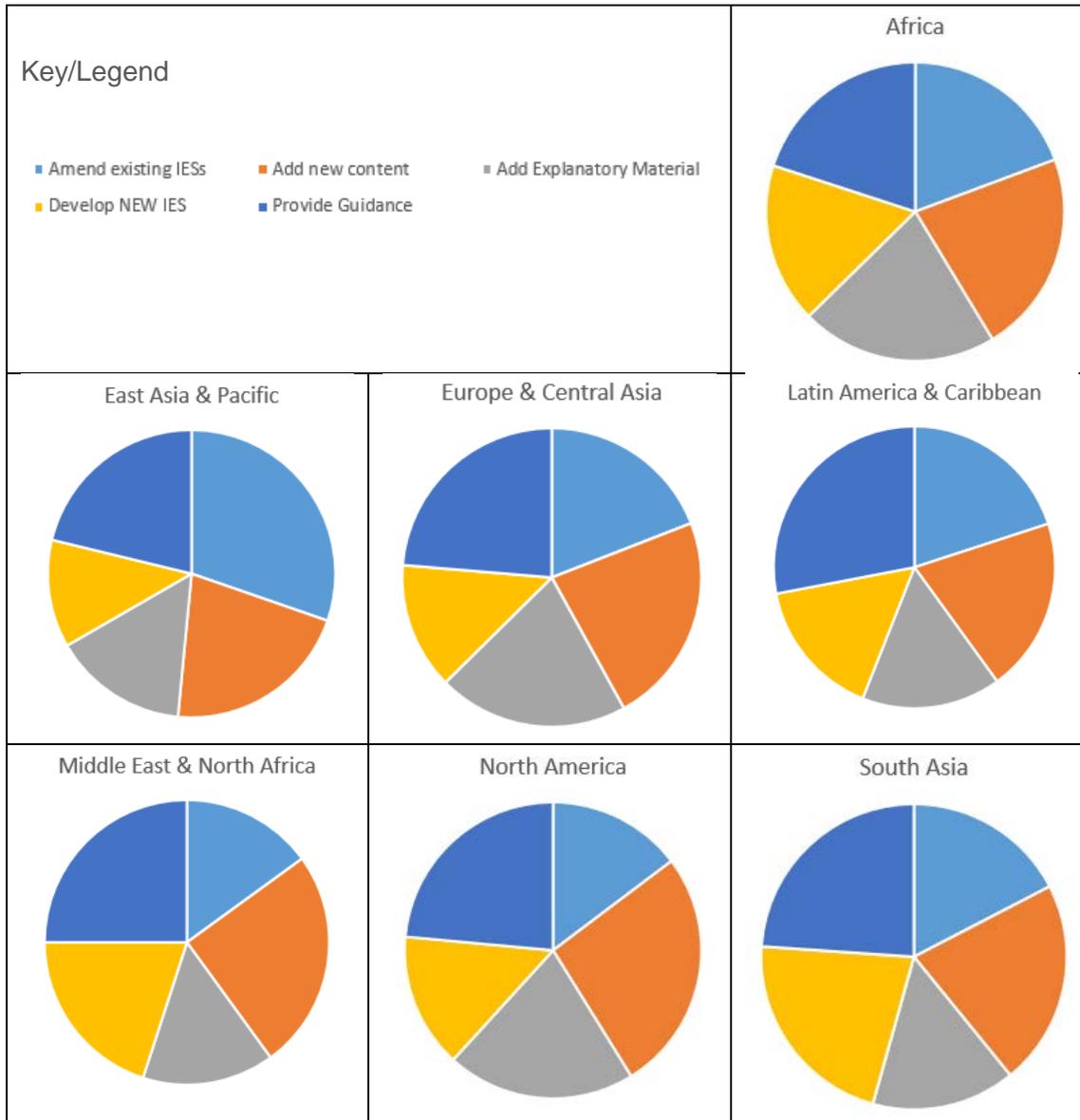
The results are shown in percentage terms below:

	Amend existing IES	New Competence Areas/LOs	Add IES Explanatory Material	Develop new IES/s	Provide Guidance	All of the above	None of the above
General Survey	21%	28%	21%	14%	29%	24%	1%
IFAC Member Body	20%	20%	20%	20%	36%	28%	4%
STAREP	24%	47%	29%	18%	35%	18%	0%

Initial conclusions for consideration:

- The most consistently popular development activity across all 3 stakeholder groups appeared to be provision of guidance;
- A sizeable number of respondents also selected 'all of the above' as an option;
- While there is a very high level of STAREP support (based on a relatively small population) for the maintenance or further development of existing IESs (through modification or creation of Competence Areas or Learning Outcomes) this option also enjoyed high levels of support from the other stakeholder groups too.
- Aside from the 'none of the above' option, the 'Develop new IESs' option was, on balance, the least popular option.

A further analysis was performed on the General Survey responses to determine if there were strong preferences by region. This data included the impact of those respondents who indicated 'all of the above'.

The following preferences emerged by region:

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Key/Legend

- Amend existing IESs
- Add new content
- Add Explanatory Material
- Develop NEW IES
- Provide Guidance

As the pie charts suggest, there was a relatively even distribution of respondent preferences for each of the 5 main IES development options. Some minor differences did become apparent, for example:

- A stronger preference for amending existing IESs in East Asia & Pacific;
- Consistently high levels of support for adding new content to the IESs (from Europe & Central Asia, Middle East & Africa, North America, South Asia and Africa); and
- More support in South Asia for a new IES.

A further analysis was performed on the General Survey to focus on responses by role/organization. The impact of 'all of the above' responses was included in these graphs.

Results have been omitted when the number of respondents was less than 5 in a category.
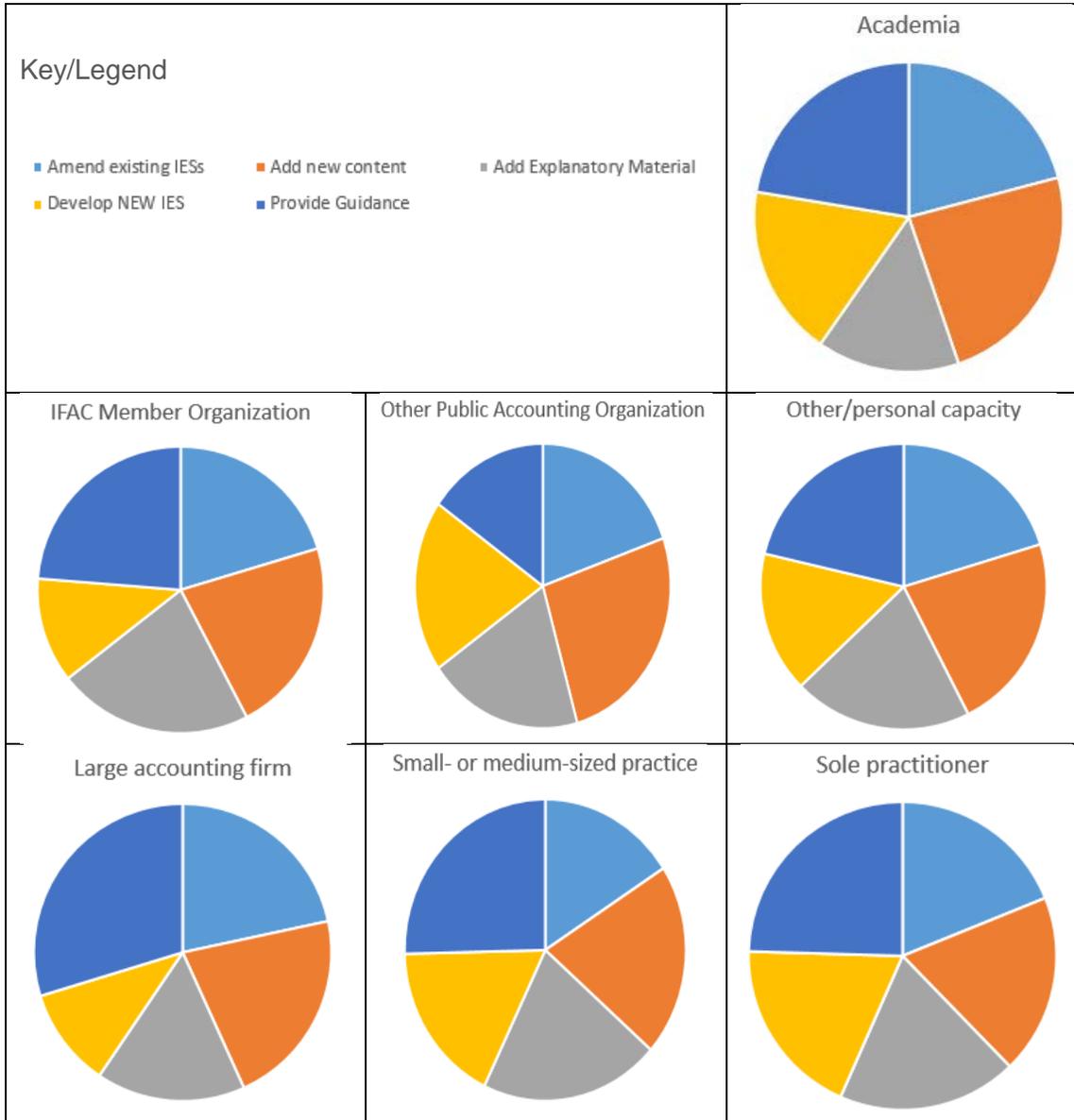
Similar to the results from the analysis performed by regions, the distribution of responses appeared to support activities in almost all of the 5 IES development options presented in the Survey.

By overlaying the distribution of General Survey responses, it revealed a preference towards certain IES development options among respondent groups. In each of the graphics below, the numbers (0, 5, 10, etc.,) represent the number of respondents which selected a particular type of standard setting development activity:
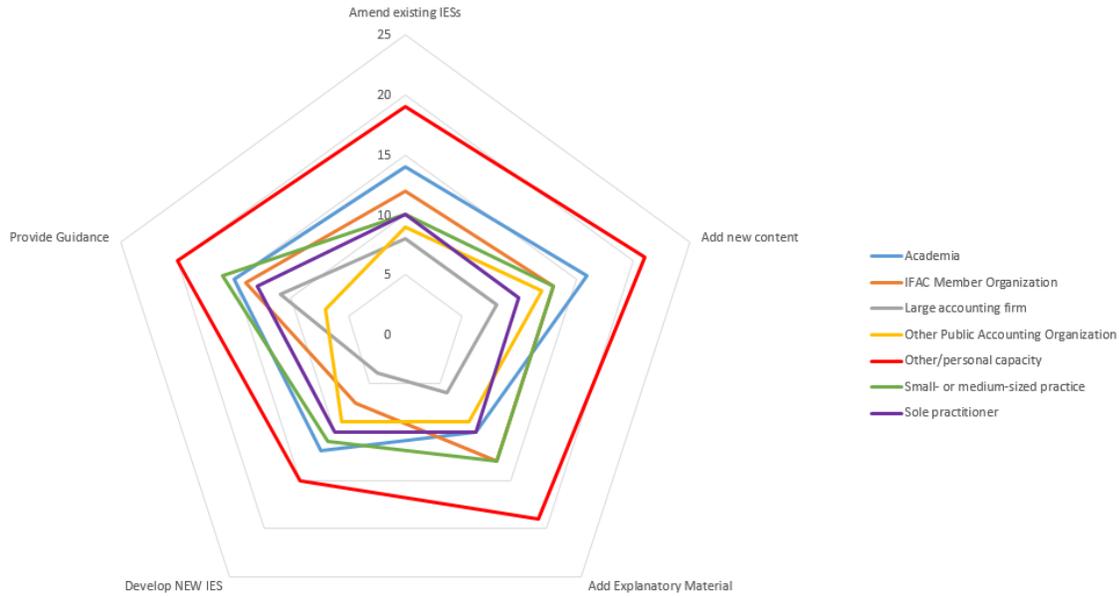

Certain respondent groups had a preference towards certain IES development activities, for example:

- Those reporting in personal/other capacity had a stronger preference for explanatory material;
- Overall there was a strong preference across most groups for the provision of guidance and new content.

These interpretations can be supported by analyzing the distribution of all respondents in total:

Combined General Survey distribution of preferences
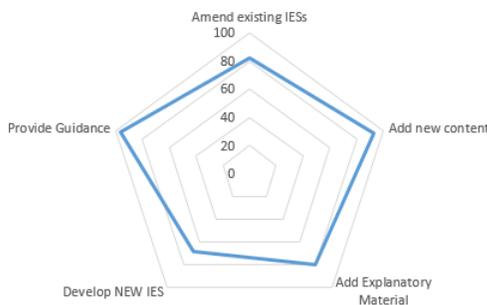
Combined General Survey and Member Organization Survey distribution of preferences

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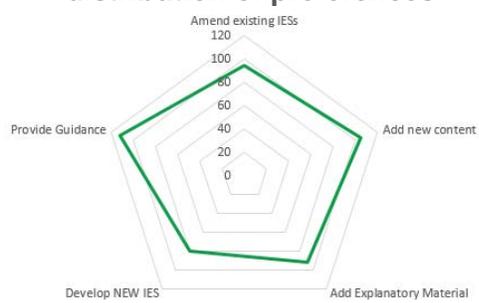
Part B, Section 4
Identification of outreach participation

One of the primary aims of the Survey had been to help identify additional sources of potential future engagement on the subject of ICT Skills. Individuals who took part in both main Surveys (and the STAREP survey) were asked whether they would like to be involved in a variety of outreach opportunities. Several respondents selected more than one option.

Number of responses	Type of Engagement Activity (General Survey)
98	*Personally interested in taking part in any future ICT skills focus groups or online discussions*
25	*Indicated their organization would like to be involved in future ICT skills focus groups or online discussions*
116	*Individual would like to have a follow-up discussion opportunity with the IAESB / Task Force on ICT Skills*

Number of responses	Type of Engagement Activity (Targeted IFAC Member Organization Survey)
9	*Personally interested in taking part in any future ICT skills focus groups or online discussions*
12	*Indicated their organization would like to be involved in future ICT skills focus groups or online discussions*
15	*Individual would like to have a follow-up discussion opportunity with the IAESB / Task Force on ICT Skills*

Although smaller in scale, the STAREP Survey also generated additional interest in future involvement. When asked the question: *Let us know if you would be interested in taking part in any future ICT Skills focus group or online discussion*s, responses were as follows:

Number of responses	Type of Engagement Activity (STAREP Survey)
9	*Yes, I'd like to be involved*
8	*Yes, my organization would like to be involved.*

As a result the Task Force has identified a large number of people who are willing or interested in taking part in future outreach efforts. A version of this Report will be shared with those individuals shortly as a 'thank you' for participation in the survey and to provide a summary of the November IAESB Board discussion points in relation to ICT Skills.

Appendix 1

Example Survey emailed issued to IFAC Member Organization contacts:

Join the ICT skills conversation

Technology is changing how we live and work and, for professional accountants,[1] it's having a direct effect on *what* they do and *how* they do it. Information and Communications Technology (ICT) skills are integral to a professional accountant's role.

Recent research suggests:

In its report, *The Future of Jobs*, the World Economic Forum ranked mobile internet/cloud technology and processing power/big data as the top two technological drivers of change in employee skills during what some are calling the Fourth Industrial Revolution.

A Gallup poll for the Business-Higher Education Forum found that by 2021, 69% of employers expect candidates with data, science, and analytic skills to receive preference for jobs in their organizations. Yet only 23% of college and university leaders say their graduates will have those skills.

McKinsey estimates that the *Digital Revolution* is happening 10 times faster and at 300 times the scale (roughly 3,000 times the impact) of the Industrial Revolution.

As part of the International Accounting Education Standards Board (IAESB)'s *Strategy and Work Plan 2017-2021*, mega trends informed the direction of accountancy education in the digital era.

The IAESB is further exploring the impact of mega trends on ICT skills of professional accountants. Take advantage of this great opportunity to influence how the accountancy profession addresses ICT skills by completing a 10-minute survey. All responses will be kept confidential.

This survey is also only the start of our conversation with your organization—further opportunities for engagement and input will follow.

Please complete the survey by July 18, 2017.

Start Survey