



International Accounting
Education
Standards Board

529 Fifth Avenue, 6th Floor, New York, NY 10017
T + 1 (212) 286-9344 F +1 (212) 286-9570
www.iaesb.org

Committee: International Accounting Education Standards Board (IAESB)

Meeting Location: Bali, Indonesia

Meeting Date: April 9 – 11, 2019

Subject: **Information and Communications Technologies Project Issues Paper – Analysis of Comments in Response to Exposure Draft**

OBJECTIVE AND RELATED AGENDA ITEMS

1. The objective of this Issues Paper is to provide an initial analysis of comments received in response to the Exposure Draft, *International Education Standards 2, 3, 4, and 8 – Information and Communications Technologies and Professional Skepticism*.
2. Integral to this Issues Paper are the following agenda items.

| | |
|-----------------|---|
| Agenda Item 2-2 | Revision of International Education Standards 2, 3, 4, and 8 – Information and Communications Technologies and Professional Skepticism - Analysis of Comments (2019) |
| Agenda Item 2-3 | Underlying Data in Analysis of Comments (04/19) |
| Agenda Item 3-1 | Professional Skepticism Issues paper (04/19) |
| Agenda Item 5-1 | Information and Communications Technologies Project Issues Paper – Development of Non-Authoritative Implementation Guidance: Detailed Learning Outcomes Relating to Information and Communications Technologies (04/19) |
| Agenda Item 5-2 | Implementation Support Materials - Non-Authoritative Detailed Learning Outcomes For Information And Communications Technologies (04/19) |

BACKGROUND

3. Changes in technology across the financial reporting supply chain are impacting the Information and Communications Technologies (“ICT”) competencies and skills needed by aspiring and professional accountants (“Accountants”) to perform their roles. Identifying the ICT skills needed by Accountants serves the public interest by enabling the accounting profession to provide high quality financial reporting, auditing, or other related financial and accounting services in the digital age. The IAESB (the “Board”) identified ICT as a strategic priority to accountancy education. The ICT Task Force was

formed and the ICT project plan was approved by the Board at its November 2017 meeting.

4. The scope of the project was driven by the overall focus on professional competence and the evolution of the knowledge, skills, and behaviors (collectively referred to as skills) needed in ICT. The approach was a baseline evaluation of skills that are needed without consideration of the existing Competency Areas and Learning Outcomes in the International Education Standards (“IESs”).
5. Five ICT elements were developed to guide the input obtained from information gathering activities and served as the basis for developing an ICT skills inventory and the resultant revised Learning Outcomes presented in the Exposure Draft.

- Business Acumen
- Behavioral Competence
- Digital Acumen
- Data Interrogation, synthesis and analysis
- Communication

6. In coordination with the Professional Skepticism Task Force, the Exposure Draft was issued on December 4, 2018 and comments were due by March 4, 2019. The following initial analysis is applicable to those comments on ICT or both ICT and Professional Skepticism. Refer to Agenda Item 3-1 for the initial analysis performed by the Professional Skepticism Task Force on comments to the revised Professional Skepticism Learning Outcomes.
7. The ICT and Professional Skepticism Task Forces will conduct a more detailed analysis of the comments received after the April 2019 Board meeting.

NUMBER OF COMMENTS RECEIVED ON STANDARD SETTING PROJECTS

8. There were a total of 32 comment letters received, which is consistent with historical rates of responses to standards revisions (Table A, *Number of Comment Letters by Standards Revision*). The Task Force has concluded this is a sufficient response rate on which to base recommendations and reach evidence-based conclusions.

Table A
Number of Comment Letters by Standards Revisions

| Standard | Total Comment Letters |
|-----------------------------------|-----------------------|
| IES 7 Revised ED | 42 |
| IES 8 Revised 2 nd ED | 26 |
| IES 8 Revision 1 st ED | 35 |

| | |
|-----------------------------------|----|
| IES 4 Revision 2 nd ED | 31 |
| IES 3 Revision ED | 32 |
| IES 2 Revision ED | 33 |
| IES 7 Redraft ED | 40 |
| IES 6 Revision ED | 37 |
| IES 5 Revision ED | 40 |
| IES 4 Revision 1 st ED | 41 |
| IES 1 Revision ED | 38 |

SUMMARY OF COMMENTS, ANALYSIS AND RECOMMENDATIONS

9. The “General Comments” and “Questions in Exposure Draft” sections that follow provide a high level summary of respondent comments with the ICT Task Force’s initial analysis and recommendations. The initial detailed analysis of the comments is provided in the “Detailed Analysis of Comments” section.

General Comments

10. There was pervasive support for the Exposure Draft. Of the 32 organizations that responded, 28 (88%) issued a general statement of support with 26 (81%) explicitly supporting the ICT and Professional Skepticism revisions. The high level of support expressed by respondents was aligned with the significant stakeholder outreach conducted where the consistent and recurring feedback was the need to address these important areas.
11. The following discussion and analysis purposefully focuses on areas of concern or comment and does not continue to highlight the overall support for revisions to the Learning Outcomes in the Exposure Draft. The basis for this approach was to ensure there was a detailed and thorough examination of all responses that could be considered contrary to the positive evidence obtained through the areas of support. It is important that the focus on addressing concerns or comments should not negate or bias the overwhelming support that was expressed in the comment letters and through all phases of the information gathering activities.
12. There were several areas where respondents expressed concern. A high level summary of these considerations are provided in Table B, *Primary Considerations Raised with ICT and Professional Skepticism Task Forces Responses*. A more detailed analysis is provided in the “Detailed Analysis of Comments” section and Appendix I contains the verbatim responses from respondents for these general areas of concern.
13. In order to contextualize the extent of comments, the percentage and number of respondents who expressed concern is also provided. Because these were included in the general statement area, there was no distinction between ICT and Professional Skepticism.

Table B
Primary Considerations Raised with ICT and Professional Skepticism Task Forces Responses

| Considerations | |
|----------------|---|
| 1 | <p><i>Proposed revisions are coming too soon after the most recent revisions to these same standards.</i></p> <p style="text-align: right;">9% (n=3)</p> |
| | <p>There is disruption that may be caused when standards are changed frequently and without sufficient time to implement across a wide range of stakeholders with differing responsibilities over accountancy education programs. With that lens, the following points were considered.</p> <ul style="list-style-type: none"> • The effective dates for extant IES 2, 3, and 4 was July 1, 2015, which is 6 years prior to the proposed effective date for Revised IES 2, 3, and 4. The effective date for IES 8 was July 1, 2016, which is 5 years prior to the proposed effective date of Revised IES 8. IES 8 is directed at the more limited audience of engagement partners responsible for the audits of financial statements. • A program review can be undertaken with a regular frequency, for example, between 3 to 5 years. It may be that changes in the external environment require a program change earlier¹. As evidenced through the information gathering activities, the rapid pace of change on the ways in which businesses operate, and new and changing demands for skills by Accountants, there is evidence that program review cycles may also need to be accelerated. • The extent of stakeholder outreach and analysis undertaken by the Board for ICT and Professional Skepticism and the recently issued IES 7, <i>Continuing Professional Development (Revised)</i> were broader and more in-depth than that employed in the past for standards development. This approach was effective in assessing whether the existing standards were fit-for-purpose. The preponderance of evidence supported the conclusion there was a gap in the standards and now was the time for change. <p>The ICT and Professional Skepticism Task Forces believe the factors cited above combined with the 9% rate of respondents who identified this as a concern is sufficient evidence to support the continued pursuit of issuing revised standards.</p> |

¹ Response to question 26 from the IAESB Staff Questions and Answers “Guidance to Support the Implementation of a Learning Outcomes Approach” dated January 2016.

| Considerations | |
|----------------|---|
| 2 | <p><i>Insufficient time to the Board to sufficiently analyze and address comments, consider the nature and extent of future standards setting, and the continuing nature and authority of the IESs.</i></p> <p style="text-align: right;">19% (n=6)</p> <p>The ICT Task Force commenced its principal activities in February 2017 with the project plan approved by the Board in November 2017. The timing of the Exposure Draft and analysis of comments is consistent with the original project plan and does not represent an accelerated or truncated due process. As evidenced by this Issues Paper and the Professional Skepticism Issues Paper, the analysis of comments has progressed significantly.</p> <p>The ICT and Professional Skepticism Task Forces believe there is sufficient time and resources to pursue the revised standards while ensuring the Board achieves its primary obligation to the public interest including through the adherence to established due process.</p> <p>While outside of the Board’s activities, the International Accounting Education Transition Advisory Group in conjunction with IFAC have progressed the considerations related to future standards setting since publishing the Exposure Draft in December 2018. The following information is provided for reference purposes.</p> <ul style="list-style-type: none"> • The IESs will be retained. • Credibility of the output for revised standards will be achieved through a consultation process to be determined by IFAC Staff and reviewed by the International Panel on Accountancy Education under IFAC Board oversight. • Authority of the IESs will continue to be achieved under Statement of Member Obligation 2, <i>International Education Standards for Professional Accountants and Other Pronouncements Issued by the IAESB</i>. <p>The ICT and Professional Skepticism Task Forces recommend the International Panel on Accountancy Education demonstrate the authority of the IESs and IFAC’s commitment to their maintenance through supporting the adoption and implementation of IES 2, 3, 4 and 8, if revised.</p> |
| 3 | <p><i>Need further coordination with other boards to ensure the latest thinking of the International Auditing and Assurance Standards Board (IAASB) and International Ethics Standards Board for Accountants (IESBA) is considered.</i></p> <p style="text-align: right;">9% (n=3)</p> <p>Education is the cornerstone to the effective application of standards issued by the IAASB and IESBA. One of the objectives of the ICT Task Force was to conduct significant information gathering activities to support the proposed Exposure Draft in anticipation of an increasing gap in Accountants’ skills to provide high quality service.</p> <p>In addition, the Chair of the Professional Skepticism Task Force was a member of the Professional Skepticism Working Group, which included representatives from the IAASB and IESBA. This</p> |

| | Considerations | |
|--|---|--|
| | <p>working group was formed to formulate views on whether and how each of the three boards' sets of international standards could further contribute to strengthening the understanding and application of the concept of professional skepticism as it applies to an audit.</p> <p>The mandate for the IAESB, IAASB, and IESBA differ – the IAESB is directed to aspiring and professional accountants; the IAASB is primarily directed to auditors of financial statements, and the IESBA is directed to the topic of ethics. Additionally, each of the independent standard setting Boards operate under different timelines and strategies and each have taken a different approach to addressing ICT and Professional Skepticism.</p> <p>While the ICT and Professional Skepticism Task Forces have monitored the IAASB and IESBA activities, the Task Forces continue to focus on the Board's wider mandate that includes, technical competence; professional skills; professional values and attitudes; and professional competence for engagement partners responsible for audits of financial statements. The ICT Task Force considered the benefit of waiting until IESBA and IAASB progressed further on their projects (e.g., ISA 315 (Revised), <i>Identifying and Assessing the Risks of Material Misstatement</i>) against the negative consequences of delaying the principles-based learning outcomes based on the preponderance of evidence obtained supporting the need for change.</p> <p>There are significant benefits and merits to closer coordination between the independent standard setting boards, and limited steps towards this objective have already commenced. For example, the ICT Task Force had a conversation with the IAASB Data Analytic Working Group, conducted an analysis of existing ISAs and Ethics Standards and will obtain input from a technical advisor on the IAASB to the non-authoritative detailed learning outcomes (NDLOs) as further discussed in Issues Paper 5-1. The Professional Skepticism Task Force also considered the views from the cross-board professional Skepticism Working group during the deliberations and development of the Exposure Draft.</p> <p>The ICT and Professional Skepticism Task Forces believe it is: i) in the public interest to timely issue standards when gaps have been identified, ii) important to be responsive to input from Member Bodies as a result of outreach activities, and iii) relevant to consider the 9% response rate. These factors support the pursuit of issuing revised standards.</p> <p>The ICT and Professional Skepticism Task Forces also recommend the International Panel on Accountancy Education further strengthen the coordination with the IAASB, IESBA and IPSASB under the new Model.</p> | |

Integral to the following question is the detailed analysis starting in paragraph 14.

Requested Action:

A. What is the Board’s point of view on the ICT and Professional Skepticism Task Forces following recommendations:

1. The evaluation of the three primary areas of concern have been adequately performed and the analysis is persuasive in reaching the conclusion to pursue the issuance of revised standards.
2. Recommendations to the International Panel on Accountancy Education:
 - a. Demonstrate the authority of the IESs through supporting the adoption and implementation of IES 2, 3, 4 and 8 (if revised).
 - b. Develop a process to further strengthen the coordination and interaction with the IAASB, IESBA and IPSASB.

Questions in Exposure Draft

14. In addition to the three primary areas addressed above, the responses to the questions in the Exposure Draft were analyzed. Table C, *Overall Observations on Responses to Questions*, provides a summary of the analysis performed with the percentage of the respondents with comments to the total comment letters received. These are observations where the comment was directed towards ICT or both ICT and Professional Skepticism.

**Table C
Overall Observations on Responses to Questions**

| Question | | Overall Observations | |
|----------|--|--|----------------------|
| 1 | Suggest changes to learning outcomes if you do not support the proposed revisions. | <p>There were over 100 individual comments recommending proposed revised learning outcomes that included refinements, return to extant learning outcomes or changes to a directive verb.</p> <p>Fourteen percent of respondents stated they did not agree with the proposed revised learning outcomes.</p> | <p>13% (n=4)</p> |

| Question | | Overall Observations | |
|----------|---------------------------------------|---|------------|
| | | <p>The ICT Task Force performed an initial evaluation of the recommendations within the context that the premise to standard setting is the sufficiency of evidence to support the issuance of new standards or changes to standards.</p> <p>The ICT Task Force considered the following data points:</p> <ul style="list-style-type: none"> • Almost 80% of the respondents stated they supported the proposed revised learning outcomes. • Five respondents (ACCA, CPA Australia, ANAN, CAI, CAA & TAS) had no individual comments on the proposed learning outcomes. • The highest number of comments to a single learning outcome was 8. • Of the comments on a single learning outcome, they were inconsistent and did not present a discernable theme. <p>The ICT Task Force debated the comments received and agreed they were all valuable for consideration. While considering the factors above, the ICT Task Force will conduct a more detailed evaluation of each comment and consider revisions to the learning outcomes in the Exposure Draft after the April 2019 meeting.</p> <p>In addition, the comments received may inform the non-authoritative guidance as further discussed in Issues Paper 5-1.</p> | |
| 2 | Additional Learning Outcomes Expected | <p>Respondents commented that learning outcomes should contain specific technologies such as artificial intelligence, software packages or types, or coding and application development. In addition, respondents commented there were opportunities for new learning outcomes specific to the consideration of ICT in the context of audits.</p> <p>Fifty percent of respondent indicated no new learning outcomes were expected.</p> | 50% (n=15) |
| | | <p>The ICT Task Force considered the practical needs of Accountants to learn and use the most current technologies and tools. There was extensive deliberation on the balance between the technologies known</p> | |

| Question | | Overall Observations | |
|----------|---|--|------------------------|
| | | <p>today, the expected disruptive effect of changing technologies, and the objective of identifying skills that transcend a specific technology.</p> <p>With this view, the proposed learning outcomes were written to deliberately exclude any specific technology and instead to focus on the need for technology agility – the ability to use, apply and modify skills as technologies continue to evolve and new ones are developed. This view was also fully supported during the information gathering activities.</p> <p>The ICT Task Force believes there is an opportunity for the International Panel on Accountancy Education to consider an optimal way in which to provide guidance on specific technologies.</p> <p>The expectation for new learning outcomes in the context of audits was debated by the ICT Task Force. Auditors are a key component in the financial reporting chain and high quality service is expected and demanded from auditors. The ICT Task Force debated the balance between the application of IESs to all Accountants and this important role auditors serve. A further analysis will be performed by the ICT Task Force on these suggestions by respondents.</p> | |
| 3 | Suggest changes to new definitions of Information and Communications Technologies if you do not support | <p>ICT Definition</p> <ul style="list-style-type: none"> The following verbs were suggested by respondents to be included in the definition: create; store, protect and disseminate; analyze; analyze and evaluate. In addition, comments were made to include specific technologies (see Question 2 above) in the definition. <p>One respondent did not agree with including the definition of ICT.</p> | <p>3% (n=1)</p> |
| | | <p>Similar to the ICT Task Force’s deliberations on the inclusion of a specific technology, it was concluded that inclusion in the ICT definition would also quickly become outdated and fail to emphasize the “timeless” skills needed to operate in a rapidly changing environment.</p> <p>The ICT Task Force will further analyze the suggested changes that include additional words and terms after the April 2019 Board meeting.</p> | |

| Question | Overall Observations | | |
|----------|---|--|-----------|
| 4 | Additional terms that require further clarification | <p>Additional clarifications were requested for the following terms: “data” and “information” separately and together; collaboration skills; adequate and sufficient; impact and influence in the context of “use ICT to communicate with impact and influence others”.</p> <p>Twenty percent of respondents requested additional terms or clarifications.</p> | 20% (n=5) |
| | | <p>The ICT Task Force debated and considered the following factors:</p> <ul style="list-style-type: none"> • Each area for clarification was requested by one respondent only. • These areas for clarification can most effectively be addressed through examples and contextualized situations to provide insight into their application. • There are inherent limitations in defining terms that are broadly applied and used extensively in accountancy education. <p>The ICT Task Force is further debating the nature and extent of the clarification on “use ICT to communicate with impact and influence others”.</p> <p>After debating the other requests for clarification, the ICT Task Force recommends the International Panel on Accountancy Education oversee the development of examples in the application of these terms to a diverse set of situations.</p> | |

Integral to the following question is the detailed analysis starting in paragraph 15.

Questions:

- B. What is the Board’s point of view on the ICT Task Force’s following recommendations?**
- 1. Learning Outcomes should not reference specific technologies.**
 - 2. Further clarify “use ICT to communicate with impact and influence others”.**
 - 3. Recommendations to the International Panel on Accountancy Education:**
 - a. Guidance on the skills needed for specific technologies**
 - b. Development of examples in the application of more commonly used terms in a variety of situations**

DETAILED ANALYSIS OF COMMENTS

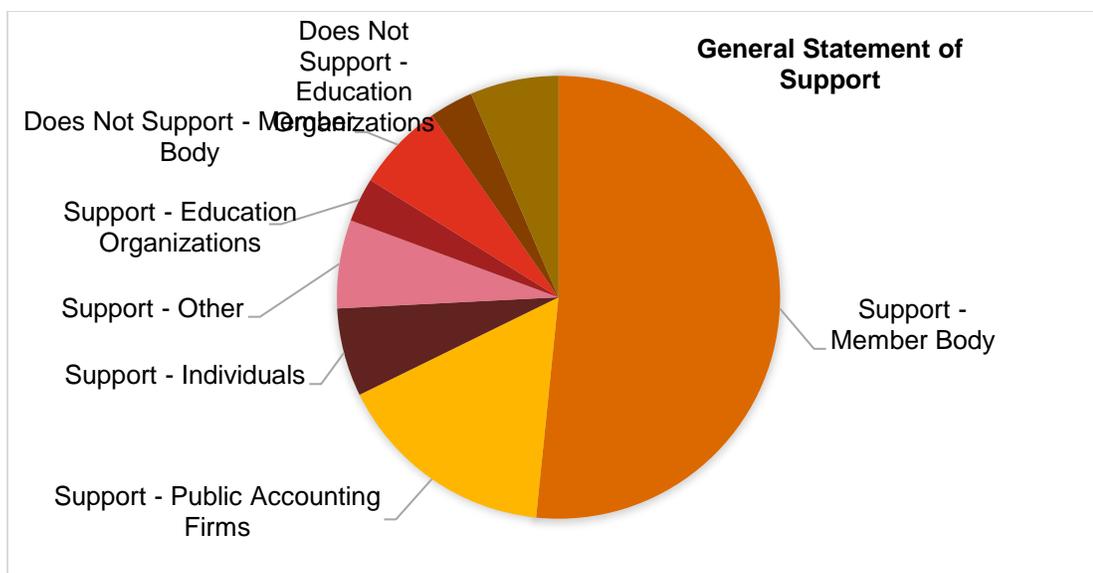
General Statements of Support

15. Of the 32 organizations that responded, 28 issued a general statement of support with 26 explicitly supporting the ICT and Professional Skepticism revisions as presented in the Exposure Draft.

General Statements of Concern

16. Two member body organizations (IDW and WPK) and one professional accountancy education organization (Common Content Project) stated they do not believe the IESs should be revised².

² WPK and IDW are participating institutes of the Common Content Project. The ICT Task Force noted there were two other participating institutes (CAI and ICAS) who separately issued comment letters and indicated their support for the changes.



17. Themes from those respondents that did not support the proposed changes to the learning outcomes are presented below.

- Recent Changes** – Three respondents (IDW, WPK, and Common Content) who did not support the proposed changes indicated that there was concern about revising standards so soon after the last revisions made were effective. The respondents note the length of the education pipeline, often three to four years at University plus a number of years of additional professional education, means that many of these changes will require several years to flow through the education programs.
- New Model** – Three respondents (IDW, WPK, and Common Content) who did not support the proposed changes indicated there is concern with the upcoming restructuring of the IAESB. Concerns include sufficient time to analyze and address comments and consideration as to the nature and extent of future standards setting and the continuing nature and authority of the IESs.

While supportive of the Exposure Draft, similar concerns were raised by three respondents (ICAEW, BDO, and DTT).

- Coordination with Other Boards** (IAASB and IESBA) – Two respondents (IDW and WPK) who did not support the proposed changes indicated a concern that there had been insufficient coordination with the IAASB and IESBA.

While supportive of the Exposure Draft, similar concerns were raised by one respondent (PwC).

18. The ICT Task Force’s conclusions and recommendations are presented in Table B *Considerations Raised and ICT Task Force Responses* in paragraph 13. The question to the Board is Question A on page 7.

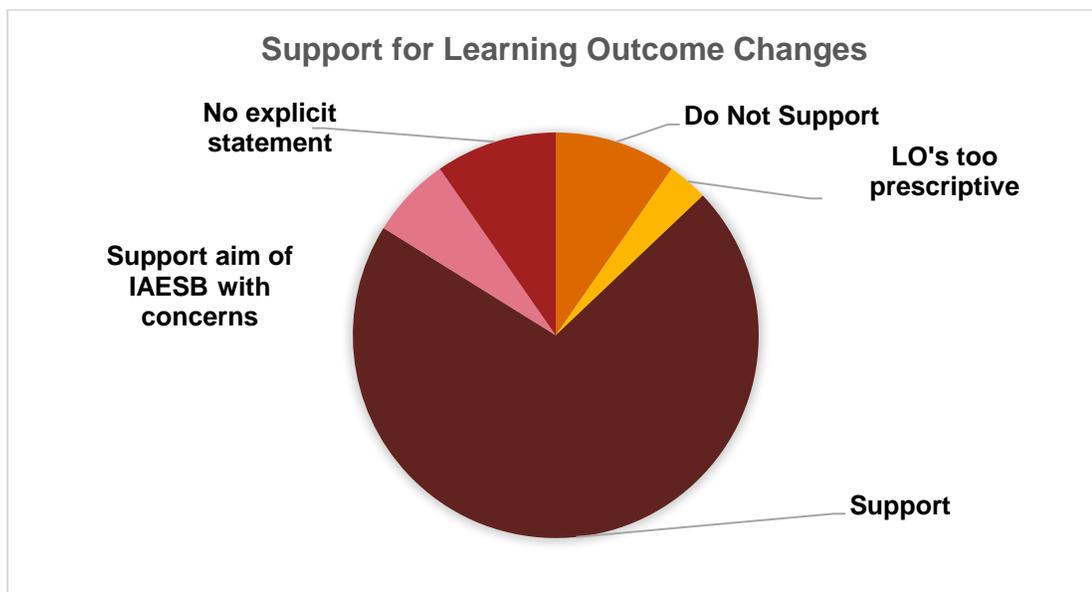
Analysis of Responses to Questions

Question No. 1

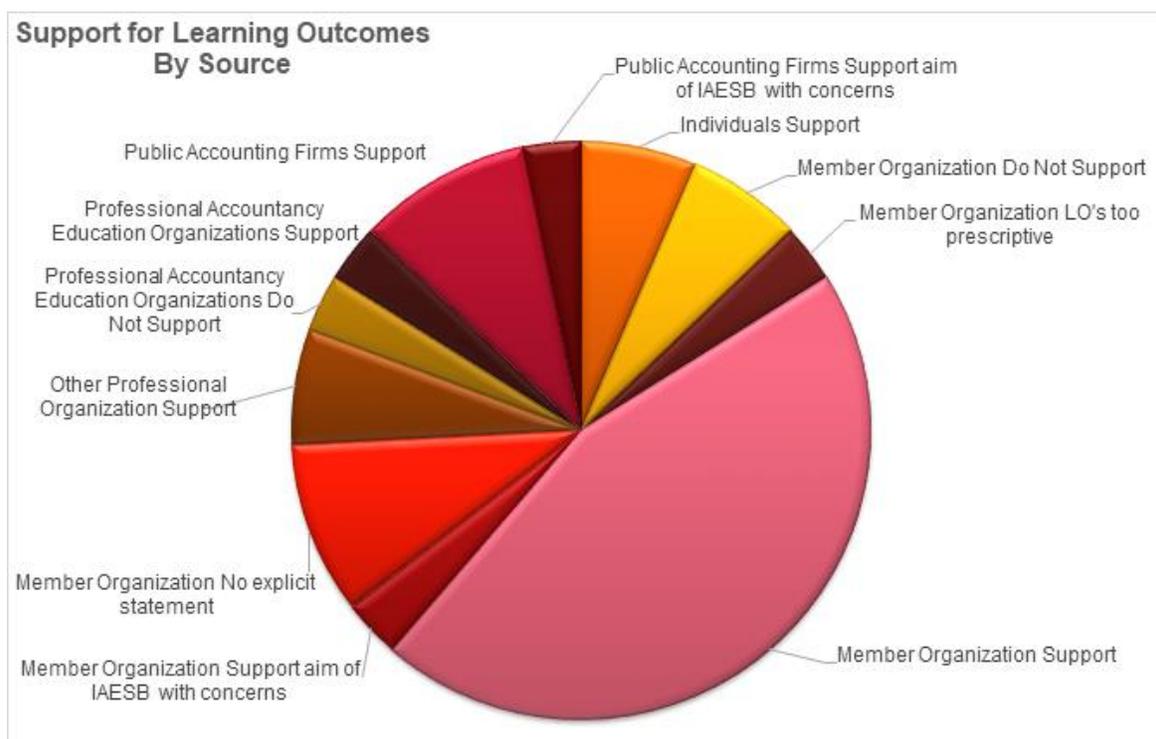
19. For reference, the first question in the Exposure Draft is presented below.

Do you support the proposed revisions to learning outcomes related to the areas of Information and Communications Technologies (“ICT”) and Professional Skepticism? If not, what changes would you suggest?

20. Excluding responses identified related to professional skepticism, 22 (71%) of the respondents supported the revisions to learning outcomes and three respondents (IAA, ICAP, MIA) offered no explicit statement of support, but their support can be inferred based on the nature of the comment within the letter. In addition, two respondents (ICAEW, KPMG) indicated the revisions were either too prescriptive or not clearly aligned with the objective and four respondents (AICPA, IDW, WPK and Common Content) were not supportive of the changes.



21. The following chart considers this data by source.



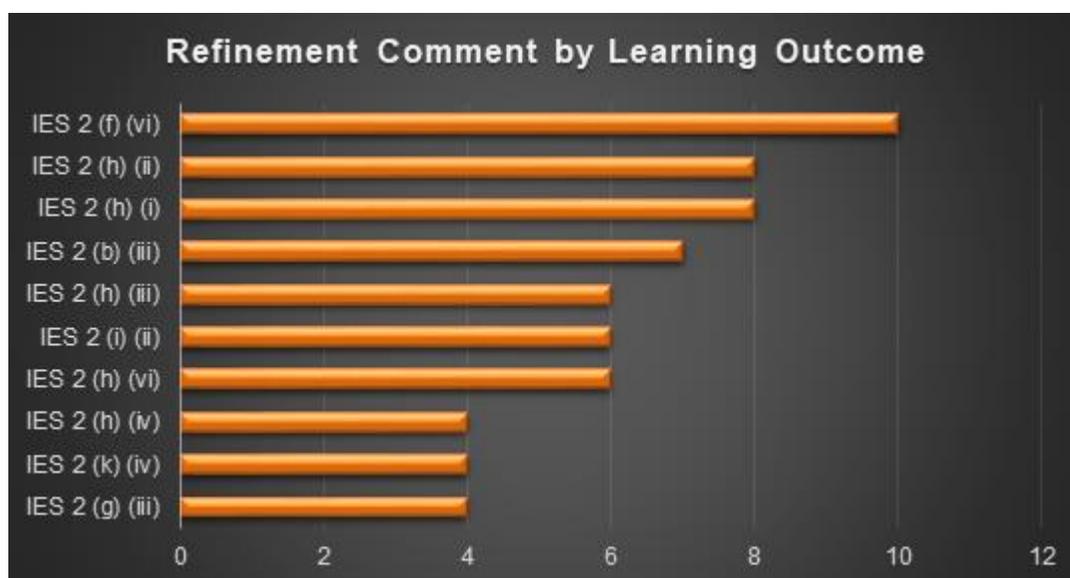
22. There were 28 respondents who provided comments on suggested new learning outcomes, refinements to the proposed learning outcomes or definition, and changes to the directive verb used. The ICT Task Force disaggregated each response letter into the number of individual comments as summarized in Table D, *Number of Individual Comments by Recommended Change*.

Table D
Number of Individual Comments by Recommended Change

| | Area of Change | Number of Individual Comments |
|----|--|-------------------------------|
| 1 | Refine Proposed Learning Outcome* | 68 |
| 2 | Retain extant verbiage/Learning Outcome * | 18 |
| 3 | Reconsider Use of Proposed Verb * | 11 |
| 4 | Reconsider Proposed Competence area or Proficiency | 8 |
| 5 | Need examples/implementation guidance | 7 |
| 6 | Refine Definitions | 6 |
| 7 | Change IES - Respondents indicated that Learning Objective would be better suited in a different IES | 6 |
| 8 | Expand Discussion - Respondents indicated that the discussion with regards to leadership, mentoring, partnering and risk analysis should be expanded | 5 |
| 9 | Re-ordering of Learning Outcomes within an individual competency area | 5 |
| 10 | Consider Refining Proposed Learning Objective for Clarity when Translated to a Second Language * | 4 |

| | | |
|----|--|------------|
| 11 | Coordinate with Boards - Similar to the comments noted previously, respondents indicated that coordination is needed with the IAASB and IESBA. | 3 |
| 12 | Broaden Scope of IES - Respondents felt that existing discussion does not cover all areas of concern in the current day | 2 |
| 13 | Reference specific technology - Respondents indicated that the theme of Artificial Intelligence should be included | 1 |
| | Total | 144 |

23. Table D, *Number of Individual Comments by Recommended Change*, was used to identify those areas where comments were made for changes to the proposed learning outcomes in the Exposure Draft as denoted with an asterisk (*). This provided the information needed to identify where further analysis was warranted.
24. The following chart shows the breakdown by learning outcome where there were four or more individual comments. While an analysis of all comments was performed and a further detailed analysis will be performed by the ICT Task Force after the April 2019 Board meeting, this provides an overview of those learning outcome with a higher level of comments.



25. The proposed Learning Outcomes marked-for-changes from the extant learning outcomes as presented in the Exposure Draft are provided below with the associated individual comments from respondents. Where there is more than one individual comment, the number of respondents with similar comments is included. After the April 2019 Board meeting, the ICT Task Force will further analyze the comments and propose, as and if warranted, revisions to the proposed learning outcomes in the Exposure Draft.

| Proposed Learning Outcomes in ED | Comments Provided |
|---|--|
| <p>IES 2 (b) (iii) Analyze financial and nonfinancial data to provide relevant meaningful information for-to support management decision making.</p> | <ul style="list-style-type: none"> • Retain the term “relevant” (4 – ICAS, IDW, WPK, Common Content) • Combine Data and Information (DTT) • Include “and identify reliable data” after Analyze (MIA) • Changes not ICT or PS related, suggest reverting to previous learning outcome (KPMG) |
| <p>IES 2 (f) (vi) Assess the adequacy of systems, processes and controls for capturing, transmitting, reporting and safeguarding data and information.</p> | <ul style="list-style-type: none"> • Need to consider professional's ability at various levels (Azua & Brito) • Skills in learning outcome appears to border on skill required by an IT specialist (2 – BDO, Azua & Brito) • Consider combining with another IES (EYG) • Refine learning outcome to include assessing and storing (MIA) • Refine learning outcome to include processing and analyzing (PWC) • Expand the learning outcome to include design and configuration of systems and communication with ICT professional (IMCP) • Suggest change of verb to something more foundational such as “analyze” or “understand” (JICPA) |
| <p>IES 2 (g) (iii) Apply data protection and privacy regulations when accessing, storing, generating, using and sharing data and information. Analyze the adequacy of general information technology controls and relevant application controls.</p> | <ul style="list-style-type: none"> • Retain extant learning outcome (2 – ICAEW, KPMG) • Need to consider professional's ability at various levels (Azua & Brito) • Include Gathering or collecting when addressing privacy (AICPA) |
| <p>IES 2 (h) (i) Analyze the adequacy of processes and controls. Analyze the adequacy of general information technology controls and relevant application controls.</p> | <ul style="list-style-type: none"> • Retain extant learning outcomes. Proposed changes remove the context for the learning outcome (2 – ICAP, PwC) • Add internal controls and safeguarding the confidentiality, availability and integrity of data and systems (MIA) |

| Proposed Learning Outcomes in ED | Comments Provided |
|--|---|
| | <ul style="list-style-type: none"> • Combine with other learning outcomes (BDO) • Context removed for these learning outcomes. These need a reference to financial or business matters (4 – ICAS, IDW, WPK, Common Content) |
| <p>IES 2 (h) (ii) Recommend improvements to processes and controls. Analyze the adequacy of processes and controls.</p> | <ul style="list-style-type: none"> • Proposed revision is too general and not ICT specific (5 – ICAS, IDW, WPK, PwC, Common Content) • Change verb to “Explain” (ICAS) • Change verb to “Apply” (Bowman & Lemon) • Retain extant learning outcome (ICAP) |
| <p>IES 2 (h) (iii) Apply ICT to increase the efficiency and effectiveness of processes.</p> | <ul style="list-style-type: none"> • Add controls (2 – MIA, BDO) • Proposed revision is too general and not ICT specific (2 –WPK, Common Content) • Retain extant learning outcome (ICAP) • Limit to financial processes (AAT) |
| <p>IES 2 (h) (iv) Explain how ICT supports data analysis and decision making. Use ICT to analyze data and information technology to support decision making through business analytics.</p> | <ul style="list-style-type: none"> • Change verb to “Explain” (3 - IDW, WPK, Common Content) • Retain extant learning outcome (ICAP) |
| <p>IES 2 (h) (vi) Use ICT to communicate with impact and influence others.</p> | <ul style="list-style-type: none"> • Reconsider use of "Communicate with Impact" (DTT) • "Influence" may not be consistent with role of independent Auditor (PWC) • Change category to "Interpersonal and Communication" (BDO) • Revert to extant language and make this non-authoritative (ICAP) |
| <p>IES 2 (k) (iv) Explain the processes that may be used to develop and implement the strategy of an organization.</p> | <ul style="list-style-type: none"> • Incorporate ICT into this learning outcome or retain extant language (2 – ISCA, KPMG) • Incorporate risk and its potential impact on strategy (AICPA) |

| Proposed Learning Outcomes in ED | Comments Provided |
|----------------------------------|--|
| | <ul style="list-style-type: none"> Incorporate the understanding of an accountant’s role in these processes (AAT) |

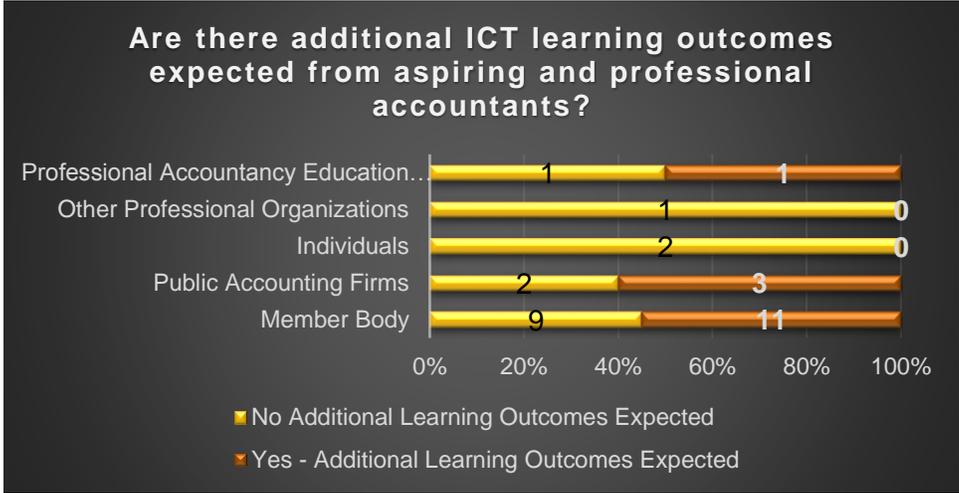
26. See Appendix II, for a similar analysis of learning outcomes where there were three comments or less. The ICT Task Force will also perform further analysis of these comments and propose, as and if warranted, revisions to the proposed Learning Outcomes in the Exposure Draft.

Question No. 2

27. For reference, the second question included in the Exposure Draft is provided below.

Are there additional ICT and professional skepticism learning outcomes that you would expect from aspiring and professional accountants?

28. Excluding responses related to Professional Skepticism, 50% (15) of the respondents indicated additional learning outcomes were expected.



Numbers in bars represent numbers of respondents in each category.

29. Where new learning outcomes were recommended by respondents, these were further analyzed by type in order to identify themes.



30. The two most significant themes identified are learning outcomes that address specific technologies and ICT in an audit.

- **Specified technologies** – Nine (ANAN, ICAS, IDW, IMCP, JICPA, WPK, KPMG, PwC, Common Content) of the 30 respondents (30%) indicated they believed the new learning outcomes should also address the ability to identify, discuss and execute specific new or emerging technologies or skills including artificial intelligence, coding and app development.
- **ICT in Audit** – Six (ICPAU, ISCA, MIA, BDO, KPMG, PWC) of the 30 respondents (13%) indicated areas of opportunities for new learning outcomes include the impact of ICT on the audit strategy, execution and documentation requirements, as well as the coaching and enabling of engagement teams to identify and use technology.

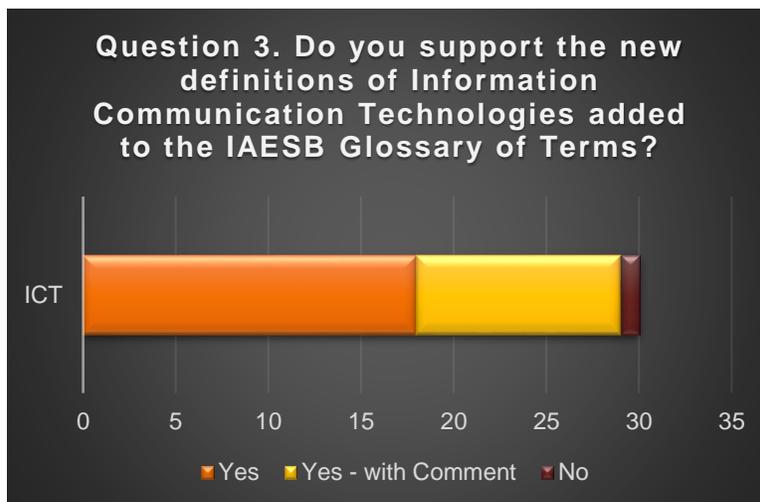
31. One respondent also raised a concern that by only including ICT in specific learning outcomes, the pervasive nature of ICT through a professional accountant’s work is not represented and may minimize the expectation that professionals embrace and use ICT to their fullest ability and extent.

Question No. 3

32. For reference, the third question in the Exposure Draft is presented below.

Do you support the new definitions of Information and Communications Technologies, Intellectual Agility, and Professional Judgment added to the IAESB Glossary of Terms? If not, what changes would you suggest?

33. Excluding responses attributable to professional skepticism, substantially all of the respondents indicated they supported the proposed definitions with or without suggested modifications (ICT = 29 out of 30 or 97%; Intellectual Agility = 28 out of 30 or 93%). In this analysis “Yes” was either explicit or inferred. Inference was determined if the respondent commented on one definition but was silent with respect to others.



34. For reference, the definition of ICT in the Exposure Draft is provided below.

Information and Communications Technologies - A diverse set of technologies, techniques, and processes used to capture, manage, transform, and communicate data and information.

35. The following summarizes the comments raised. The parenthetical numbers provide the number of respondents with similar comments.
- Specific technologies and tools such as artificial intelligence, algorithms, and other emerging technologies should be included (6 – AICPA, ICAS, IDW, IMCP, WPK, Common Content).
 - Include other skills such as create, analyze, store, and protect data and information (3 – ISCA, MIA, PWC).

Question No. 4

36. For reference, the fourth question in the Exposure Draft is provided below.

Are there any terms within the new and revised learning outcomes of IESs 2, 3, 4, and 8, which require further clarification? If so, please explain the nature of the changes.

37. Three respondents (MIA, ICAEW, KPMG) indicated additional clarifications were necessary for the following terms:
- “Data” and “Information” separately and together
 - Collaboration Skills
 - Adequate and Sufficient
 - Impact and Influence in the context of “use ICT to communicate with impact and influence others”
38. The ICT Task Force’s recommendations on the specific questions are presented in Table C *Overall Observations on Responses to Questions* in paragraph 14. The question to the Board is Question B and is on page 11.

| |
|---|
| PROPOSED MILESTONES AND TIMELINE |
|---|

39. The proposed milestones and expected completion dates from the current time period forward are presented below.

| | Milestones | Completion Dates |
|---|---|---|
| 1 | Obtain advice and input from the CAG and Board. | April 2019 |
| 2 | Evaluate the totality of comments received, advice from the CAG and direction from the Board and present the final standards to the Board for approval. | June 2019 |
| 3 | Issue final standards and ICT implementation guidance | September 2019 (after PIOB approval) |

Appendix I

The comments from the three areas identified in paragraph 13 are provided below.

| | |
|---|--|
| 1 | <i>Proposed revisions are coming too soon after the most recent revisions to these same standards.</i> |
|---|--|

IDW - *First, we note that the these IESs have recently been subjected to substantial change, including clarification, and were not effective until 2015 – in the case of IES 8 2016 – which means that many jurisdictions did not implement them until then or shortly thereafter. The length of the education pipeline (often three to four years at university plus a number of years of additional professional education) means that many of these changes will require several years to flow through the education programs. This implies that in many cases, the effect on certain syllabuses did not take place until 2017 or 2018. It is too early to tell whether changes are needed at this stage without having undertaken a survey on how the new IESs have been implemented in practice.*

WPK - *First, we note that the these IESs have recently been subjected to substantial change, including clarification, and were not effective until 2015 – in the case of IES 8 2016 – which means that many jurisdictions did not implement them until then or shortly thereafter. The length of the education pipeline (often three to four years at university plus a number of years of additional professional education) means that many of these changes will require several years to flow through the education programs. This implies that in many cases, the effect on certain syllabuses did not take place until 2017 or 2018. It is too early to tell whether changes are needed at this stage without having undertaken a survey on how the new IESs have been implemented in practice.*

Common Content - *In the last Steering Group meeting, we had agreed that we would have overall comments that we disagreed with the IAESB seeking to issue new IESs at this stage so close to the restructuring of the IAESB and so soon after the new IESs were effective. The affected IESs were not effective until 2015 (IES 8: 2016), which means that many jurisdictions did not implement them until then or shortly thereafter. The education pipeline means that many of these changes will require at least two or three years to flow through the education programs. This implies that in many cases, the effect on syllabuses did not take place until 2017 or 2018. It is too early to tell whether changes are needed at this stage without having undertaken a survey of how the new standards have been implemented in practice. We, therefore, disagree with the IAESB making changes at this stage.*

| | |
|---|--|
| 2 | <i>Insufficient life to the Board to sufficiently analyze and address comments, consider the nature and extent of future standards setting, and the continuing nature and authority of the IESs.</i> |
|---|--|

ICAEW - *We also are concerned that these proposed changes to the IESs should not be introduced while the IAESB is currently undergoing changes in its structure and function.*

IDW - *Second, we note that IFAC is currently considering a fundamental restructuring of the IAESB at this time that will include considering the nature and extent of its standards setting competence and the continuing nature and authority of the IESs. The IAESB was aware of these considerations when it issued the exposure draft and we are also aware that some important CAG members questioned whether it is appropriate to issue new standards so close to such a fundamental restructuring of the IAESB and potentially to the authority of its standards. It also explains why the IAESB applied a shorter exposure period (three rather than four months) than would normally be the case. We also question whether, given the short time period of its current existence, the IAESB will be in a position to properly analyse and take into account the comments it receives on this draft prior to issuing the proposed standards in final form.*

WPK - *Second, we note that IFAC is currently considering a fundamental restructuring of the IAESB at this time that will include considering the nature and extent of its standards setting competence and the continuing nature and authority of the IESs. The IAESB was aware of these considerations when it issued the exposure draft and we are also aware that some important CAG members questioned whether it is appropriate to issue new standards so close to such a fundamental restructuring of the IAESB and potentially to the authority of its standards. It also explains why the IAESB applied a shorter exposure period (three rather than four months) than would normally be the case. We also question whether, given the short time period of its current existence, the IAESB will be in a position to properly analyse and take into account the comments it receives on this draft prior to issuing the proposed standards in final form.*

BDO - *The exposure draft indicates that the new IESs are likely to become effective from January 1, 2021 which is likely to be 18 months after the IAESB itself has ceased to exist. For the IESs, including this set of revised IESs, to have legitimacy with IFAC Member Bodies, regulators, firms and other stakeholders, it is important that IFAC ensures appropriate measures are undertaken to provide appropriate custodianship and communication of the revised suite of IESs.*

DTT - *We note that this Exposure Draft has been released at a time when it has been communicated that the existing Board is to be dissolved from mid-2019 onwards. We understand the necessity, in such circumstances, to move swiftly to complete key ongoing projects and we support the Board's efforts to do this. However it is unclear to us how these revised IESs, together with the other IESs and supporting guidance developed by the*

Board, will be effectively governed and maintained in future in the absence of an independent standard setting board.

Common Content - In the last Steering Group meeting, we had agreed that we would have overall comments that we disagreed with the IAESB seeking to issue new IESs at this stage so close to the restructuring of the IAESB and so soon after the new IESs were effective. The affected IESs were not effective until 2015 (IES 8: 2016), which means that many jurisdictions did not implement them until then or shortly thereafter. The education pipeline means that many of these changes will require at least two or three years to flow through the education programs. This implies that in many cases, the effect on syllabuses did not take place until 2017 or 2018. It is too early to tell whether changes are needed at this stage without having undertaken a survey of how the new standards have been implemented in practice. We, therefore, disagree with the IAESB making changes at this stage.

| | |
|---|---|
| 3 | Need further coordination with other boards to ensure the latest thinking of the IAASB and IESBA is considered. |
|---|---|

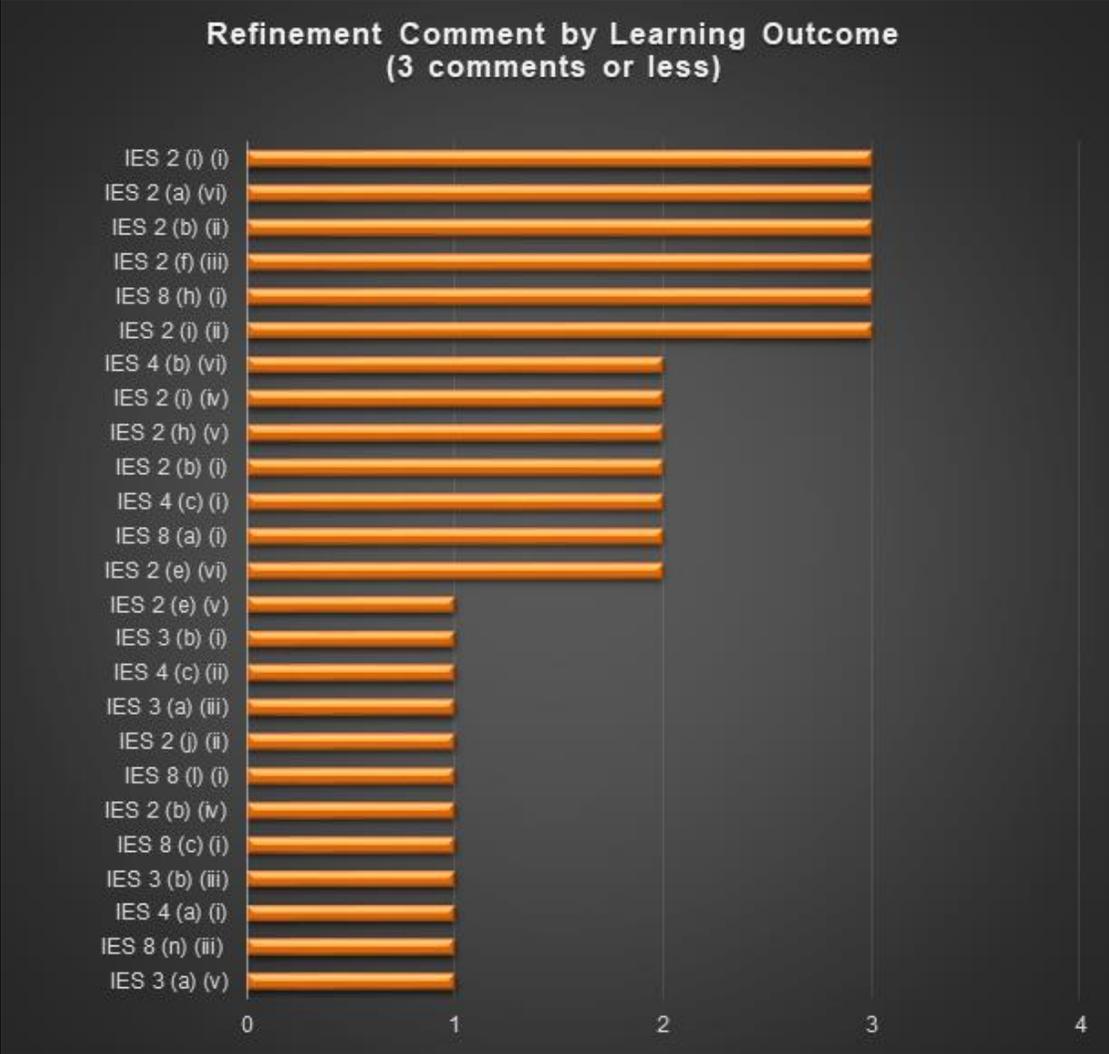
IDW - We also note that the IAESB has not adequately liaised with IESBA and the IAASB on the appropriate use of professional skepticism and on the definition of professional judgment. We believe that in extending the exercise of professional skepticism to activities beyond those contemplated by IESBA and the IAASB, and by changing the meaning of professional judgment, the IAESB is exceeding its mandate to provide standards on education alone.

WPK - We also note that the IAESB has not adequately liaised with IESBA and the IAASB on the appropriate use of professional skepticism and on the definition of professional judgment. We believe that in extending the exercise of professional skepticism to activities beyond those contemplated by IESBA and the IAASB, and by changing the meaning of professional judgment, the IAESB is exceeding its mandate to provide standards on education alone.

PwC - We believe it is important and in the best interest of the profession that the international standard setting Boards work collaboratively to achieve alignment where projects involve deliberation of the same or similar topics and where standards define and contextualize common core concepts. There may be merit in deferring revision of the IESs to allow further time for collaboration ahead of the IAASB's finalization of the revisions to ISA 315.

Appendix II

- 1. The following chart shows the breakdown by learning outcome where there were three or less individual comments.



- 2. The proposed Learning Outcomes marked-for-changes from the extant learning outcomes as presented in the Exposure Draft are provided below with the associated individual comments from respondents. Where there is more than one individual comment, the number of respondents with similar comments is included in the parenthetical.

| Proposed Learning Outcomes in ED | Comments Provided |
|--|--|
| <p>IES 2 (a) (vi) - Interpret reports that include non-financial data, for example sustainability reports and integrated reports information.</p> | <ul style="list-style-type: none"> Do not update this learning outcome at this time as changes are not clearly related to ICT. (KPMG) Do not remove examples and add using different techniques to the end to improve clarity (ICAP) Include “financial” in addition to non-financial (EFFA) |
| <p>IES 2 (b) (i) [No changes to proposed extant learning outcome] - Apply techniques to support management decision making, including product costing, variance analysis, inventory management, and budgeting and forecasting.</p> | <ul style="list-style-type: none"> Include service costing/profitability, variance analysis and operational improvement and optimization. (2 – AICPA, PAIB) |
| <p>IES 2 (b) (ii) [No changes proposed to extant learning outcome] - Apply appropriate quantitative techniques to analyze cost behavior and the drivers of costs.</p> | <ul style="list-style-type: none"> Phrase is vague and limiting. Proposed language to change from a limited “cost accounting” view to a forward looking business partner view. (2 – AICPA, PAIB). Need to consider a professional’s English language capability at differing levels (Azua & Brito) |
| <p>IES 2 (b) (iv) Prepare reports information to support management decision making, on topics including reports that focus information on planning and budgeting, cost management, quality control, performance measurement, and benchmarking. comparative analysis.</p> | <ul style="list-style-type: none"> Retain extant language (KPMG) |
| <p>IES 2 (e) (v) [No changes proposed to extant learning outcome] - Explain the key elements of assurance engagements and applicable standards that are relevant to such engagements.</p> | <ul style="list-style-type: none"> Suggest that learning outcomes in IES 2 (e) be re-ordered and (e) (v) be reworded to “Describe the objectives and stages involved in performing an assurance engagement.” (EFAA) |
| <p>IES 2 (e) (vi) - Assess audit evidence for appropriateness and sufficiency.</p> | <ul style="list-style-type: none"> Is the intention for this to be limited to audit engagements only? (DTT) This learning outcome may omit or ignore other evidence (PWC) |

| Proposed Learning Outcomes in ED | Comments Provided |
|--|---|
| <p>IES 2 (f) (iii) - Apply ICT to support the identification, reporting and management of risk in an organization. Analyze an organization's risks and opportunities using a risk management framework.</p> | <ul style="list-style-type: none"> • Include “assessment” and “monitoring” (MIA) • The phrase is not understood. (Azua & Brito) • Does ICT need to be explicitly included? (CAANZ) |
| <p>IES 2 (h) (v) - Use ICT to analyze data and information. Explain how information technology contributes to data analysis and decision making.</p> | <ul style="list-style-type: none"> • Retain extant learning outcome (ICAP) • Include “identify, collect, clean, prepare and analyze” (MIA) |
| <p>IES 2 (i) (i) - Describe the environment in which an organization operates, including the main-primary economic, legal, political, technological, social, technical, international, and cultural forces aspects.</p> | <ul style="list-style-type: none"> • Consider further how different aspects of the environment interact (ACIPA) • Disagree with the removal of “technical” (AICPA) • Rather than describing the environment, there may be more benefit to describing the impact the environment has on an organization (BDO) |
| <p>IES 2 (i) (ii) Explain the impact of ICT developments on business and organizational environments.</p> | <ul style="list-style-type: none"> • Change verb (3 – AAT, IMCP, PWC). One suggests “Promote the digital Transformation...”, one suggests “Advise on the business...”. One suggests “Recognize” instead of “Explain |
| <p>IES 2 (i) (iv) - Identify the features of globalization, including the role of multinationals, e-commerce, and emerging markets.</p> | <ul style="list-style-type: none"> • Do not update this learning outcome at this time as changes are not clearly related to ICT. (KPMG) • There may be more benefit to describing the impact the environment has on an organization (BDO) |
| <p>IES 2 (j) (ii) [No changes proposed to extant learning outcome] - Describe the effect of changes in macroeconomic indicators on business activity.</p> | <ul style="list-style-type: none"> • Consider whether ICT should be included in this learning outcome (DTT) |

| Proposed Learning Outcomes in ED | Comments Provided |
|---|---|
| <p>IES 3 (a) (iii) - Identify when it is appropriate to consult with specialists others to solve problems and reach informed conclusions.</p> | <ul style="list-style-type: none"> • Retain “specialist” term rather than others (NASBA) |
| <p>IES 3 (a) (v) - Demonstrate intellectual agility. Recommend solutions to unstructured, multi-faceted problems</p> | <ul style="list-style-type: none"> • Learning outcomes need a business context as this is too general. (ICAS) |
| <p>IES 3 (b) (i) [No changes proposed to extant learning outcome] - Display cooperation and teamwork when working towards organizational goals.</p> | <ul style="list-style-type: none"> • Include “team building” (ICAP) |
| <p>IES 3 (b) (iii) - Communicate clearly and concisely when presenting, discussing and reporting in formal and informal situations, both in writing and orally.</p> | <ul style="list-style-type: none"> • Need to consider professional's ability at various levels (Azua & Brito) |
| <p>IES 4 (a) (i) - Apply a questioning mindset critically to assess financial mind when assessing data and information and other relevant data.</p> | <ul style="list-style-type: none"> • Replace “assessing” with “appraising” |
| <p>IES 4 (b) (vi) - Apply ethical principles when accessing, storing, generating, using and sharing data and information.</p> | <ul style="list-style-type: none"> • Make this consistent with the similar learning outcome in IES 8 (BDO) • Learning outcome is too prescriptive and would potentially require significant change to syllabi (ICAEW) |
| <p>IES 4 (c) (i) - Explain the role importance of ethics within the profession and in relation to the concept of social responsibility.</p> | <ul style="list-style-type: none"> • Change verb to “Demonstrate” and split between “social responsibility” and “business operations and good governance” (AAT) • Retain extant learning outcome – importance is narrower than role (PWC) |

| Proposed Learning Outcomes in ED | Comments Provided |
|---|---|
| <p>IES 4 (c) (ii) - Explain the role importance of ethics in relation to business and good governance.</p> | <ul style="list-style-type: none"> • Change verb to “Demonstrate” and split between “social responsibility” and “business operations and good governance” (AAT) |
| <p>IES 8 (a) (i) - Lead the audit engagement through active involvement in planning, directing, and reviewing the work of the engagement team.</p> | <ul style="list-style-type: none"> • Revise wording to reflect the “importance of tone at the top” noted in the explanatory memorandum (PWC) • Disaggregate the learning outcome (ICPAU) |
| <p>IES 8 (c) (i) [No changes proposed to extant learning outcomes] - Evaluate corporate governance structures and risk assessment processes affecting the financial statements of an entity as part of the overall audit strategy.</p> | <ul style="list-style-type: none"> • Introduce a concept of “Identify those charged with governance and determine the best form of communication...” which would allow an accountant to be able to better assess the governance structure. (ICPAU) |
| <p>IES 8 (h) (i) - Evaluate the information technology (IT) ICT environment to identify controls that relate to the financial statements to determine the impact on the overall audit strategy.</p> | <ul style="list-style-type: none"> • Retain extant learning outcome (BDO) • Add “risks” to the learning outcome (2 - ISCA, EYG) |
| <p>IES 8 (l) (i) - Promote audit quality in all activities and compliance with professional and regulatory standards with a focus on protecting the public interest an appropriate resolution to ethical dilemmas threats.</p> | <ul style="list-style-type: none"> • Refine wording to “professional standards and regulatory requirements” (ICPAU) |
| <p>IES (n) (iii) - Protect the confidential Act ethically when accessing, storing, generating, using and sharing data and information of the entity in accordance with ethical responsibilities and relevant legal requirements.</p> | <ul style="list-style-type: none"> • Retain concept of legal requirements (PWC) |