

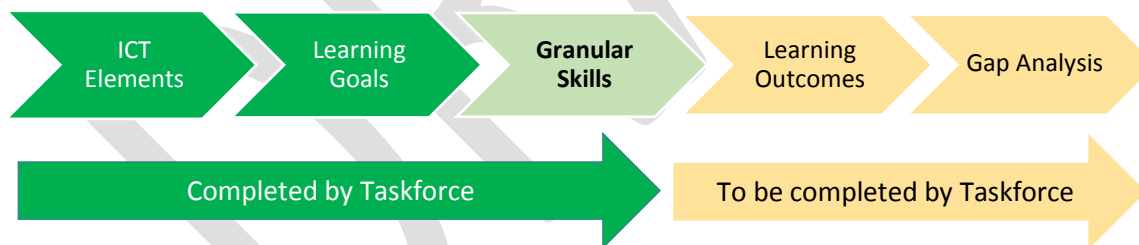


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**Committee:** International Accounting Education Standards Board (IAESB)  
**Meeting Location:** IFAC Headquarters, New York, USA  
**Meeting Date:** July 11 – 12, 2018  
**Subject:** **Proposed Learning Goals and Granular Skills (07/18)**

As discussed in Appendix 3 of Agenda Item 3-1, the Taskforce’s analysis of the information gathering activities resulted in the identification of learning goals and related granular skills. After an evaluation and conclusion by the Board of Option A, Option B, or a combination (discussed in paragraphs 23 – 25 of Agenda Item 3-1), the proposed learning goals or granular skills will be revised to reflect Learning Outcomes, including the use of an appropriate directive verb. The result will be used as the baseline to perform the gap analysis against the international education standards (IESs).



As noted in Appendix 3 of Agenda Item 3-1, the following are learning goals and granular skills developed from the learning goals, which will provide a basis for potential Learning Outcomes.

ICT Element	Learning Goals	Granular Skills
Behavioral Competence	Understands and applies the appropriate ethical use and dissemination of data (N=31) <sup>1</sup>	Understand relevant regulatory environments and requirements that govern individual data privacy.
		Consult with individuals outside of finance and accounting to collaborate on the appropriate use of data within an organization.
		Identify and report where data dissemination to third parties contradicts regulatory requirements and internal policies and procedures.
Behavioral Competence	Appropriately applies ICT knowledge and experience (N=32)	Identify similarities and differences between circumstances, technology applications and environments to serve as the basis for performing one's responsibilities.
		Apply reasoning and professional judgment to identify, evaluate and conclude on the optimal solution based on the facts and circumstances and managing risk as appropriate.
Behavioral Competence	Demonstrate intellectual curiosity, critical thinking, problem solving, agility and life-long learning. Proactively promote innovation (N=177)	Identify gaps in ICT competencies and skills by performing a periodic self-assessment and executing a plan to address areas requiring further development.
		Continuously seek out the "why" and "how" until an appropriate understanding is obtained. Use this approach in determining root causes of issues, understanding the process and flow of information and data and other areas that are new or changing.

<sup>1</sup> N represents the number of occurrences for the learning goals. Reference Appendix 3 of Agenda Item 3-1 for a discussion of how the number of occurrences were determined.

ICT Element	Learning Goals	Granular Skills
		<p>Demonstrate a willingness to try different approaches, seek out and evaluate new solutions or more effective ways to transact and conduct business, and encourage an environment of innovation through the use of technology.</p> <p>Demonstrate a willingness to adapt to and make use of new and emerging technologies impacting business and accounting information systems.</p> <p>Recognize and express the benefits of change, for example, adoption of new technologies and benefits of continuous professional development achieved through change.</p> <p>Identify risks, evaluate the severity of issues, and identify digital solutions.</p>
Behavioral Competence	<p>Demonstrates objectivity, integrity, independence, professional competence, due care, professional skepticism (N=42)</p> <p><i>To be further developed after input from Behavioral Competence and Professional Skepticism taskforces</i></p>	<p>Demonstrate objectivity, integrity, professional competence, due care, professional skepticism. This includes performing one’s responsibilities with reasonable care and diligence and obtaining sufficient information before forming conclusions.</p> <p>Demonstrate independence, where applicable, including recognizing pressures to introduce bias into conclusions.</p>
Behavioral Competence	Effectively collaborates with and guides other professionals within and across an organization (N=13)	<p>Identify gaps in other individuals’ competencies and skills and provide opportunities to address gaps through, for example, use of examples, peer feedback or encouragement to attend formal training. Provide formal or informal guidance to guide these individuals as they progress through these opportunities.</p> <p>Collaborate across cross functional areas within an organization to develop and implement solutions and drive value through an organization. Collaboration includes maintaining an open mind to innovative solutions and promoting the benefits of change.</p>

ICT Element	Learning Goals	Granular Skills
Business Acumen	Evaluate and respond to process failures (N=13)	Identify process failures and determine root cause of failure.
		Evaluate impact of failure to the process environment.
		Develop and employ appropriate response to process failure identified.
Business Acumen	Perform procedures to obtain an understanding of business models, industries and environments (N=72)	Understand business models and how technology impacts drivers of value, revenue generating activities, and the impact of the external operating environment.
		Identify the impact of industry specific considerations including business risks, processes and flow of information and data, and the application of relevant accounting standards.
		Understand emerging trends impacting the business enterprise.
Business Acumen	Obtain understanding of existing processes and design appropriate response (N=39)	Demonstrate an awareness of internal and external customers and stakeholders and their expectations and information needs.
		Understand how process, people and technology operate together when developing digital strategies for the organization.
		Obtain an understanding of the business environment and determine relevant technology-related processes and controls.
		Evaluate identified technology-related processes and controls and conclude on the completeness and effectiveness of such processes and controls.
		Recommend solutions to gaps in technology-related processes.

ICT Element	Learning Goals	Granular Skills
		Apply understanding of industry and processes in executing responsibilities, for example, external factors that impact an organization’s assets and reviewing or recording journal entries.
Business Acumen	Uses data obtained to assess risks within an organization (N=32)	Identify relevant and reliable information to use in assessing risks to the organization or environment.
		[Repeat] Assess the completeness and accuracy of information produced from digital sources.
		Evaluate the extent of risk assessment performed after consideration of the likelihood of an inappropriate decision based on the circumstances.
Business Acumen	Appropriately applies ICT related experience and knowledge to manage technology related risks (N=7)	Identify ICT risks associated with the environment and possible controls to manage risks.
		Advise on the development of IT strategies to manage ICT related risks.
Business Acumen	Evaluate financial reporting and decision making business processes and controls (N=6)	Identify improvements to business processes through the use of IT, such as producing summarized management reporting for decision making, protecting access and integrity of financial information and/or identifying new sources of technology that enhance reporting.
Communication	Able to identify and assess new channels to transmit data and information (N=25)	Identify possible new channels that can be used to share and transmit data appropriate for the circumstances.
		Identify and evaluate risks to data security relevant to the channel.
		Identify controls necessary to protect the integrity of the data transmitted through new channels prior to use.

ICT Element	Learning Goals	Granular Skills
Communication	Keeps current with new and emerging technologies (N=111)	Identify new and emerging technologies relevant to an individual's professional circumstance.
		Evaluate and advise on the impact of new technologies on business processes and the development and implementation of IT projects.
Communication	Effectively Communicates with those Charged with Governance (N=20)	Identify opportunities and necessity to communicate to those charged with governance and support individuals that have a direct line of communication to those charged with governance.
		Evaluate possible channels and identify the appropriate channel to communicate to those charged with governance with security considerations for sensitive or confidential data and information that is communicated.
		Develop a concise approach for delivery of the communication tailored towards those charged with governance.
		Explain the problem, process to resolve the problem and conclusions drawn as relevant to those charged with governance.
Communication	Effectively Communicates with Others outside of Finance or Governance functions (N=39)	Identify opportunities and necessity to communicate to individuals outside of the finance or governance functions, for example, those responsible for business processes who will benefit from understanding how technology impacts the use of data and information as it flows through the financial reporting cycle.
		Evaluate possible channels and identify the appropriate channel to communicate to individuals outside of the finance or governance functions.
		Explain the problem, process to resolve the problem and conclusions drawn as relevant to individuals outside of the finance or governance functions.

ICT Element	Learning Goals	Granular Skills
Data Interrogation, Synthesis and Analysis	Appropriately uses data in analysis and decision making processes (N=135)	Identify relevant and reliable data and information to use in business analytics. Understand the sources of the data and information, whether and how it was changed from the original source, and its consistency of presentation.
		Assess the completeness and accuracy of information produced from digital sources.
		Evaluate the appropriateness and extent of using analytics after consideration of the risk of an inappropriate decision based on the circumstances.
		Evaluate the results and consider contrary or confirming information from other sources when forming conclusions.
Data Interrogation, Synthesis and Analysis	Applies digital technology tools (N=25)	Adapt to changes in digital technology tools including computer-assisted techniques.
		Continuously seek out ways to apply digital tools to new and changing circumstances.
		Understand the benefits and limitations of visualization techniques.
		Understand the objective of the analysis, establish a basis for expectations, investigate exceptions to expectations, identify trends and understand outliers while recognizing the risk of an inappropriate decision based on the outcome.
		Applies professional judgment and skepticism when evaluating output and forming conclusions.
Data Interrogation, Synthesis and Analysis	Appropriately communicates results and inferences from data analysis (N=18)	Understand the nature of the audience in terms of their knowledge of the subject matter and preferred form in receiving communications.
		Determine the most effective channel to communicate the results, for example, based on its level of importance and the effectiveness of direct observation.

ICT Element	Learning Goals	Granular Skills
		<p>Identify and employ technologies to effectively communicate across multiple stakeholder groups.</p> <p>Communicate results, conclusions and recommendations in an impactful manner through the use of effective communication techniques, for example, through the visualization of results.</p>
<p>Data Interrogation, Synthesis and Analysis</p>	<p>Appropriately gathers and uses data to prepare and analyze financial information to meet existing and new accounting standards (N=8)</p>	<p>Identify relevant and reliable information to be used in complying with relevant accounting standards.</p> <p>[Repeat] Assess the completeness and accuracy of information produced from digital sources.</p> <p>Identify changes to business processes, new types of transactions, and changes in business models and incorporate such changes into the data and information that is used to comply with relevant accounting standards.</p>
<p>Data Interrogation, Synthesis and Analysis</p>	<p>Make use of structured, semi-structured and unstructured data (N=5)</p>	<p>Understand how structured, semi-structured and unstructured data is used by a business enterprise in recording transactions.</p> <p>Utilize appropriate tools, methods and technology to analyze and evaluate complex and unstructured data.</p> <p>Identify and employ appropriate tools and technology to mine large data sets for relevant data from various sources.</p> <p>Identify and employ appropriate tools and technology to extract relevant data from various sources.</p>
<p>Digital Acumen</p>	<p>Able to identify and assess IT controls to secure information and data in a virtual environment (N=1)</p>	<p>Promote an environment that is based on cyber security awareness.</p> <p>Identify and evaluate risks to data security relevant to the environment.</p>



ICT Element	Learning Goals	Granular Skills
		<p>Identify and implement controls necessary to protect the integrity of data and information including restricted access and program change management. Controls should include protection of data and information that is shared or transmitted digitally to third parties.</p> <p>Identify and implement controls to prevent unauthorized access and changes to engagement documentation.</p>
Digital Acumen	Able to evaluate and respond to IT failures (N=6)	<p>Develop planned responses to IT failures through “what-if” scenarios.</p> <p>Identify process or system failures and understand root cause of failure.</p> <p>Evaluate the impact of the failure to processes and data integrity.</p> <p>Develop and employ appropriate response to process or system failures based on root cause analysis and potential likelihood of the failure recurring.</p>
Digital Acumen	Appropriately applies ICT related experience and knowledge (N=64)	<p>Advise on the development of IT strategy in all areas of business.</p> <p>Evaluate and advise on the choice of technology platforms.</p> <p>Proactively manage existing technologies in use while balancing when and how new technologies should be employed to replace existing technologies.</p> <p>Recognize the impact to human stakeholders of existing technologies and new technologies that will be employed. Manage the impact, in part, through transparent communication, demonstrating the benefits of the technology, and providing opportunities to learn new skills.</p>
Digital Acumen	Appropriately assesses data transmission and security (N=55)	Understand how data and information is transferred into and from an organization with third parties (e.g., vendors, customers, government bodies).

ICT Element	Learning Goals	Granular Skills
		<p>Identify technologies that are effective in the circumstances to transmit data and information with third parties. Effectiveness can be measured by security considerations, reduction in exceptions when communicating between different technologies, and the ability of third parties to implement technology solutions.</p> <p>Understand the cause, nature and extent of risk associated with transmitting data and information through technology.</p> <p>Identify and apply ways in which to manage risk and employ techniques to monitor the effectiveness of risk mitigation.</p> <p>Apply technology after an evaluation of cyber and information security risks to the business.</p>
Digital Acumen	Establishes appropriate governance and oversight (N=7)	<p>Identify and employ information systems that provide those charged with governance with an understanding of the nature of the business and associated risks.</p> <p>Explain where technology introduces risk into the business and how that risk is mitigated.</p>
Digital Acumen	Keeps current with mechanisms to develop and execute new and emerging technologies (N=24)	<p>Continuously seek out new ways to understand how technology impacts and can improve existing systems and processes.</p> <p>Recognize and identify gaps in knowledge to understanding and use of technology and obtain additional knowledge to resolve the gap.</p> <p>Obtain input from specialists to provide further insight into new and emerging technologies and the ways in which those technologies impact processes and flow of data and information.</p>

ICT Element	Learning Goals	Granular Skills
Digital Acumen	Exhibits competence in existing, relevant technologies (N=34)	Demonstrate an understanding of how technology operates in the processing and flow of data and information, how it changes data and information and how to identify when the technology is not achieving its intended objective.
		Identify appropriate technology solutions to existing processes including where there is a higher risk of error.
Digital Acumen	Seeks to apply technologies as relevant (N=22)	Obtain an understanding of existing processes including flow of information, movement of documents, IT dependencies and points in the process where human intervention occurs.
		Evaluate where technologies can improve efficiency (e.g., timeliness) and effectiveness (e.g., accuracy) of processing data and information.
		Employ process improvement techniques to facilitate the transition to the application of technologies.
		Implement technologies and evaluate their efficiency and effectiveness on a periodic basis.