

# International Perspectives: The Role of Technical Standards in Creating Learning Futures

*The Value-Add of Leadership*

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# How We Got Here.....

HOW STANDARDS PROLIFERATE:  
(SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC)



# Why Develop and Use Standardized Data?

- Assist in the development of sound educational policies
- Improve the quality of instruction / student achievement
- Permit the comparison of educational processes across communities and locales
- Improve the accuracy and timeliness of nationwide summaries of information about education systems
- Advance the quality and impact of education research
- Facilitate reporting to the public about the condition and progress of education

# Why Develop and Use Technical Standards?

- Access to data needed today – and future access to data they have yet to identify
- Scalability that is dependent on funding cycles
- Easier comparison of provider capability and quality
- Empowerment to choose “best of breed” solutions
- Choice among customized, personalized learning experiences
- Discovery, access, and use of learning materials/tools
- Integrated instruction, assessment, and outcome reporting

# Policy Message

# Cheaper, Better, Faster

# Level Setting.....

- Interoperability Goal: *the ability to make it possible to use any data, any digital content or any software application across any computer system.*
- Community developed tech standards (specifications/frameworks) are just that – driven by their communities with a particular focus and/or needs case.
- Needs are expanding.....

# The Evolution of Expectations

- Silos between the business and use cases of data identification, management, movement and utilization disappearing
- Interoperability demanded but cannot be too complicated and must be seamless
- Marketplace and policies becoming “learner” focused and not “stuff” focused
- Change in education – time for change in standards support?

# Policy Message

- Right Information, Transparency
- When you need it, Feedback
- Where you need it, Relevance
  
- But you have to agree on **IT** first!

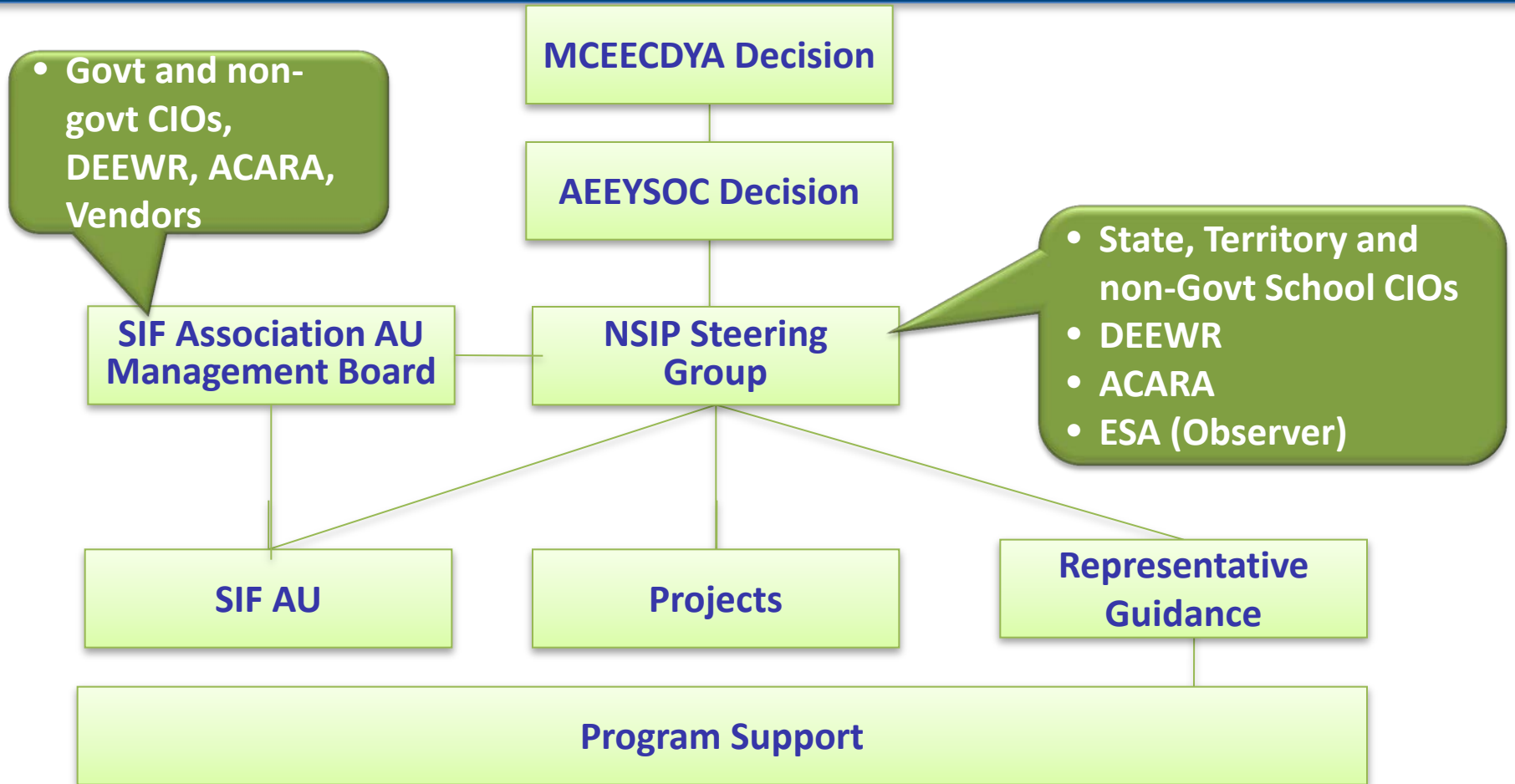
# Local Impact With Global Leveraging

- AU needs
  - Educational leaders requested standards to leverage the agreed upon “commonalities
  - Established a group of thought leaders (CIOs) to discuss common pain points
  - Federal Government Vision and Support
  - Implemented global governance and change management strategies

# Local Impact With Global Leveraging

- AU SIF Association Support
  - Supported as a new community
  - Branched current, walk away ownership given of any work
  - Global leveraging of ongoing work – larger SIF Association Board role (AU/UK/US)
  - Data Dictionary Project / Fast Tracking
  - NSIP support: enabling the business of AU government to take place based on agreed upon needs

# Government Leadership

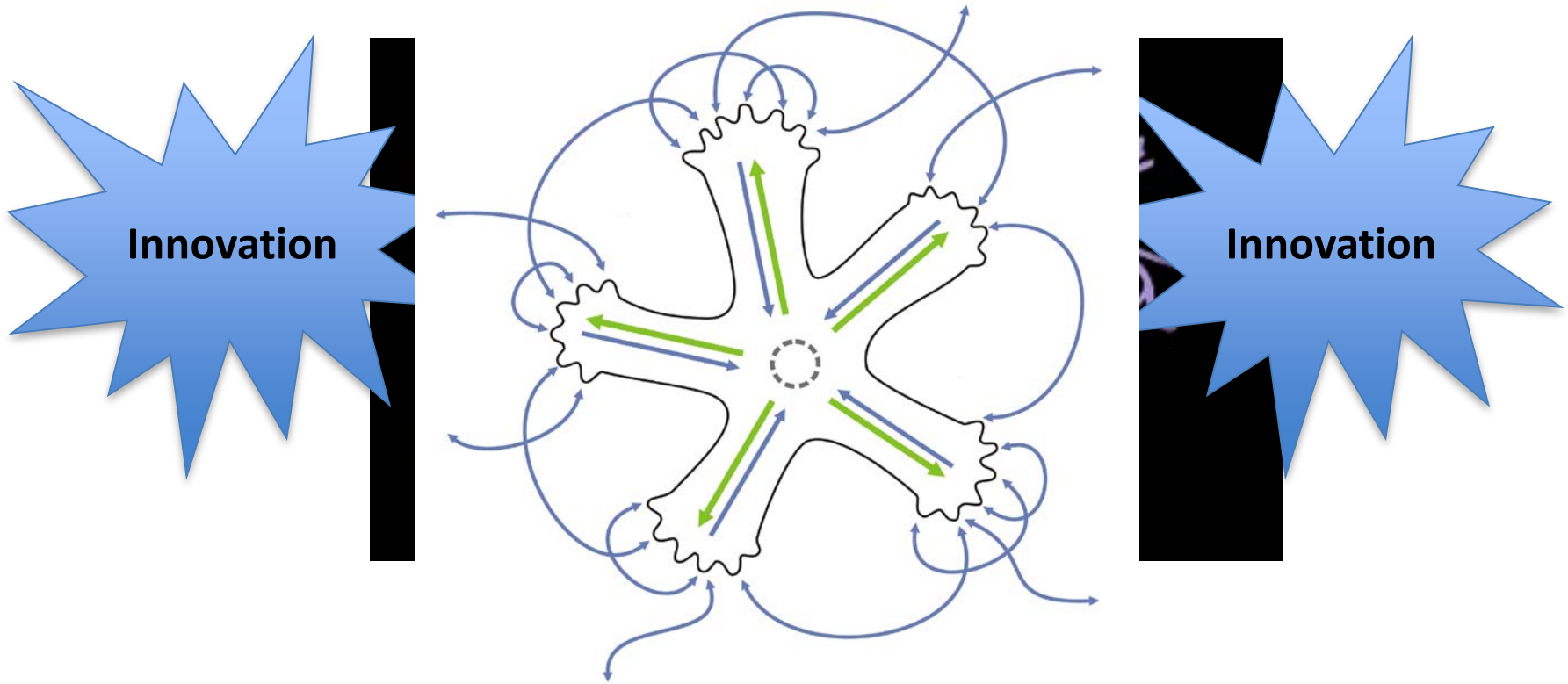


NSIP Team based at ESA, Melbourne

- **Supported Adoption**
  - Practical responses = “solutions development”.
- **Incremental Improvement**
  - Manage change in a consistent/sustainable way.
  - Leverage international interest groups.
- **Leveraging the Information Model**
  - Engage other standards = widening framework.
  - Leverage the separation of the Locale data models from the SIF Infrastructure.

<b>Established by Ministers, led by jurisdiction CIOs</b>	Ministers endorsed SIF and establishment of NSIP in Nov 2009 based on business case: benefits at national, jurisdiction, school levels
<b>National information model and standards agreed</b>	Based on Systems Interoperability Framework (SIF), IMS, etc. Standards to solve common issues
<b>National and jurisdictional projects using the information model</b>	Agreed for Australian Curriculum Connect, proposed for Improve and Online Diagnostic Testing. Investment synergies.
<b>Shared solutions to common ICT and business challenges</b>	Shared, knowledgebase, information models, computer code, services and joint investments
<b>Active vendor support</b>	Key SIF AU board and data standards working group, leadership in developing SIS Baseline
<b>Development opportunities for vendors and ed staff</b>	Boot Camp and Connect-a-thon at !dea11. Results to be shared on Friday.
<b>International partnerships</b>	SIF (US, UK), IMS, US Dept of Ed

# The Standards Balance: Stable Yet Innovation-Enabling

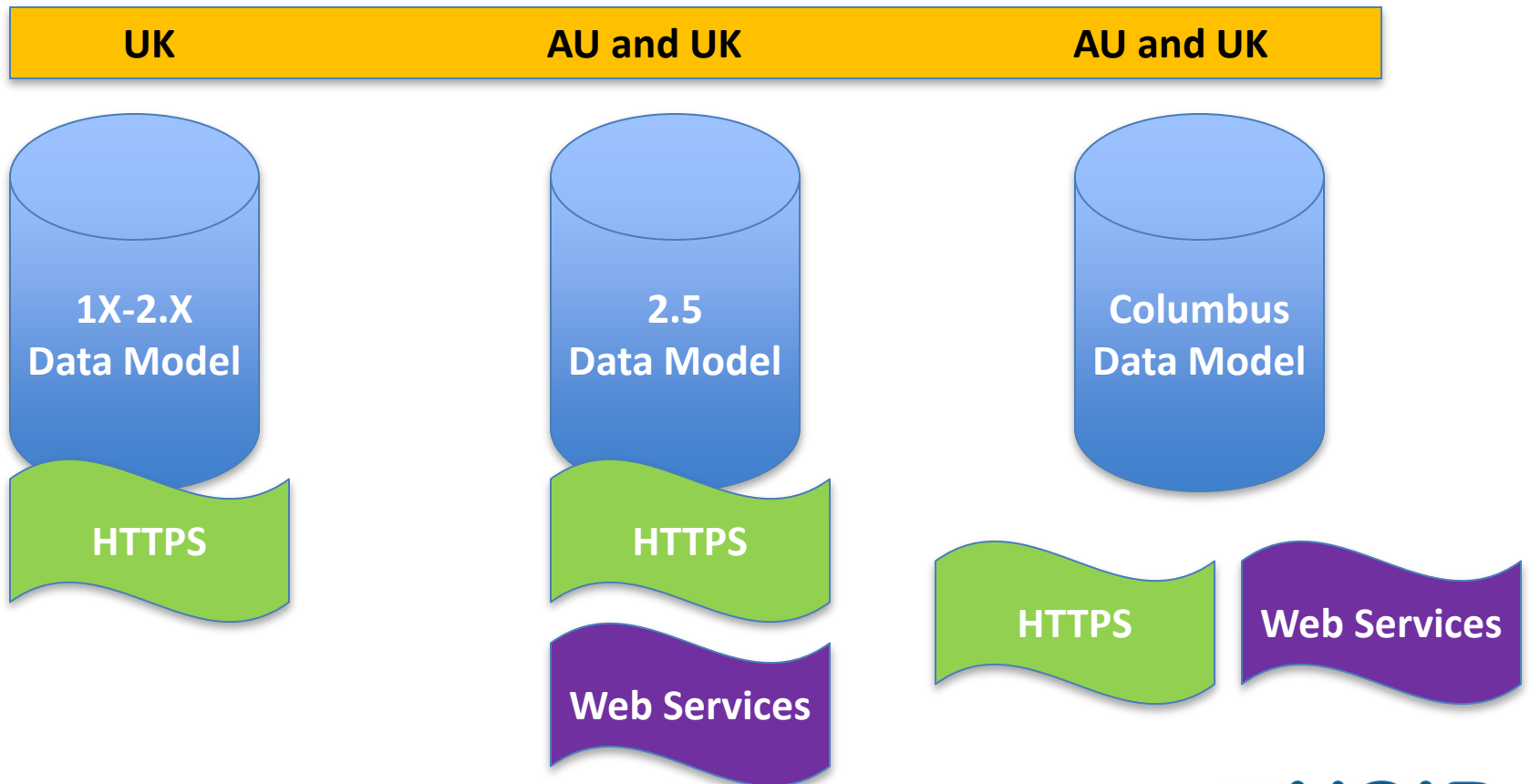


**“Unsexy” But  
Fundamental**

# Policy Message

- Increased Capability,
- Reduced Risk
- Some things fixed some things flexible

# Listening to the Drums....



- Planning & blueprinting
- Item types
- Content development & universal design
- Learning standard alignment
- Content and data reviews
- Test form construction
- Field testing
- Item banking & statistics
- Content exchange / interoperability

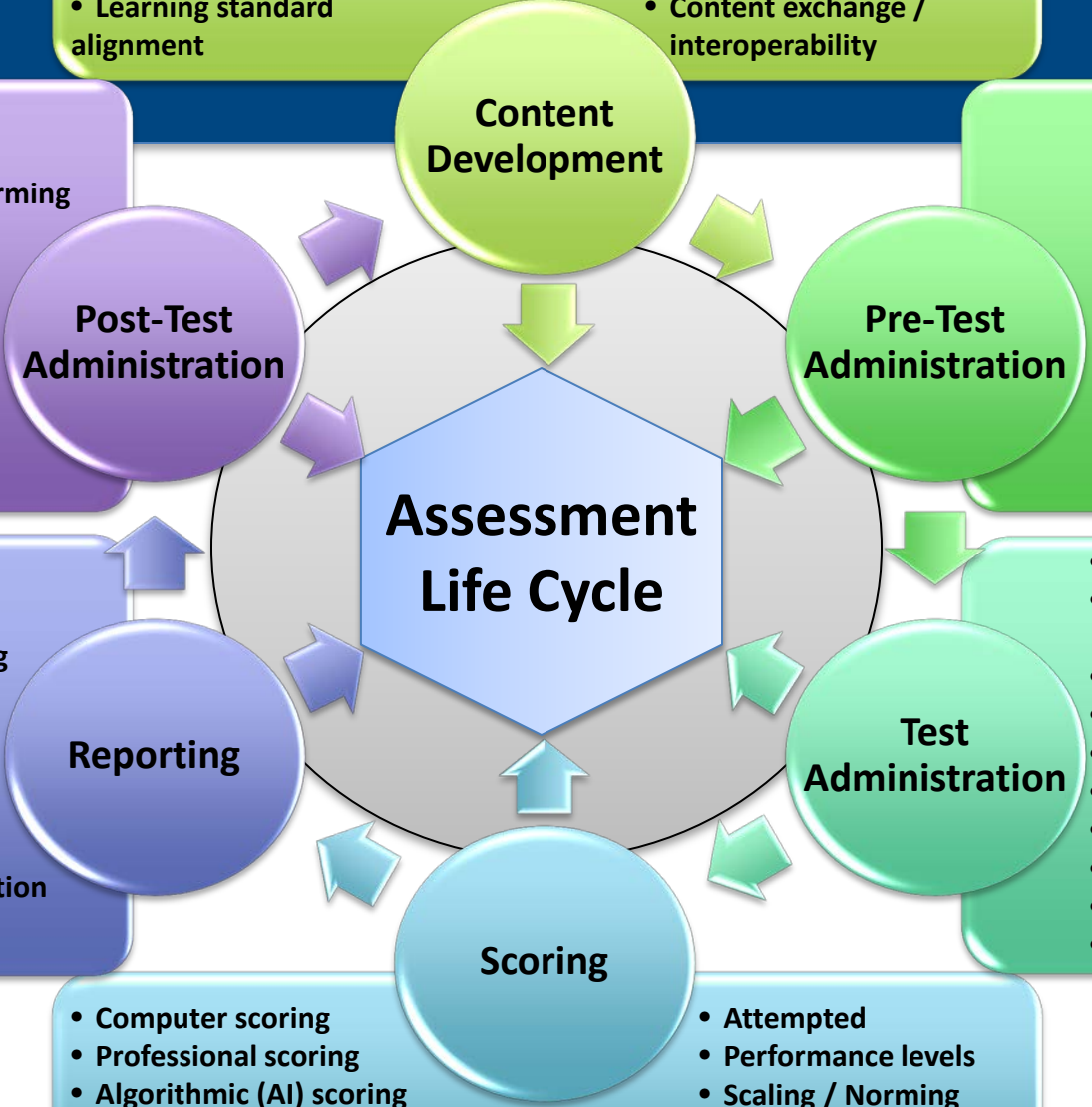
- Psychometric analysis
- Equating
- Score tables - scaling, Norming
- Performance levels / cut scores
- Field test analysis
- Aligning results with curriculum / instruction
- Program and teacher effectiveness

- Administration planning & scheduling
- Registration, assignment, Form sampling
- Online infrastructure readiness assessment
- Pre-session planning (paper / online) & setup
- Alternate form assignment

- Individual reporting
- Diagnostic reporting
- Informing & personalizing instruction
- Performance on standards
- Dashboard / summary reporting
- Aggregation / disaggregation
- Exchanging results / data

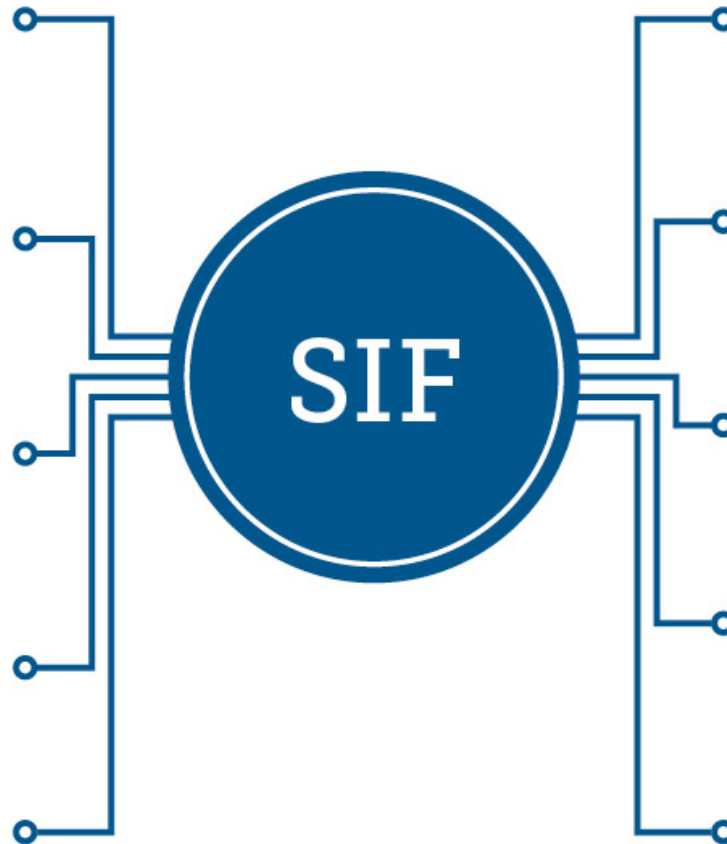
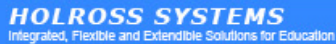
- Test form delivery
- Platform (paper, online, mobile) presentation
- Item content & tools
- Adaptive testing
- Response collection
- Proctoring controls
- Form content security
- Desktop security
- Accessibility
- Testing anomalies

- Computer scoring
- Professional scoring
- Algorithmic (AI) scoring
- Portfolio scoring
- Sub test / strand scoring
- Attempted
- Performance levels
- Scaling / Norming
- Growth scores
- Range finding



# Real World Solutions: SBP CONNECT-A-THON

— PUBLISHERS —



— SUBSCRIBERS —

# The AU SIF Community

## VENDOR MEMBERS



## END USER MEMBERS

- › Department of Education Employment and Workplace Relations
- › Australian Curriculum Assessment and Reporting Authority
- › Australian Bureau of Statistics
- › Independent Schools Council of Australia
- › ACT Education and Training Directorate
- › NSW Department of Education and Training
- › Queensland Department of Education and Training
- › SA Department for Education and Child Development
- › WA Department of Education
- › Tasmanian Department of Education
- › NT Department of Education and Training
- › Victorian Department of Education and Early Childhood Development
- › Victorian Department of Treasury and Finance
- › Catholic Network Australia
- › National Catholic Education Commission
- › Catholic Education Office Adelaide
- › Catholic Education Office Brisbane
- › Catholic Education Office Melbourne
- › Catholic Education Office Parramatta
- › Catholic Education Office Perth
- › Catholic Education Office Wollongong
- › Queensland Catholic Education Commission