Testing International
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Editor: Nicky Hayes

International Test Commission

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The 12th Conference of the International Test Commission
Save the date
14-17 July 2020
University of Luxembourg, Belval Campus, 2 avenue de l’Université, Esch-sur-Alzette, Luxembourg
As I write this first column in my presidential term for the International Test Commission (ITC), I wish to extol the work and involvement of a number of people. The first two are Drs. Dragos Illiescu and Nathalie Loye. These two individuals represent the University of Bucharest and the University of Montreal, so they are clearly representative of the ITC’s world-wide membership and influence. They also served as the President of the ITC (2016-2018) and the Program Chair of the 2018 Montreal conference, respectively. Both deserve “top billing” because both performed in extremely professional and high caliber manners and had two super years and a remarkable conference for the association.

A few words on the conference are probably appropriate. I can start by reporting that it was an unbelievably hot conference, both in terms of the currency, relevance, and importance of content covered and also the external temperature, where record temperatures in Quebec were reached. I would like to describe briefly the geographic representativeness of the conference, which was truly impressive! Not surprising given the location of the conference, the countries with the most representatives were the United States and Canada, each of which had more than 100 attendees. By my count, some 47 countries were represented with 230 attendees from North America (4 countries or territories), 77 from Europe (13 countries), 53 from Asia (18 countries), 21 from Africa (6 countries), 18 from South America (4 countries), 7 from Australia, and one from Oceania (New Zealand). The mix of cultures and ideologies permitted a true exchange of ideas and practices. Sharing, I believe, is among the most important characteristics of international professional associations, and the sharing that I heard myself was impressive. New friendships were a side-effect of the sharing, I note.

Eleven keynote presentations were provided at the conference. I have listed the individuals and their titles below.

Irini Moustaki: *The Contributions of Women in Psychometrics-Statistics: Past and Present*

Alina von Davier: *The Application of Computational Psychometrics to Process Data from Performance Assessments*

André De Champlain: *Implementing Automated Item Generation in a Large-Scale Medical Licensing Exam Program - Lessons Learned*

Bruno Zumbo: *The Reports of DIF’s Death are Greatly Exaggerated; It is Like a Phoenix Rising from the Ashes*

David Magis: *Adaptive Testing: Examples, Simulations, and Examples of Simulations*

David Hattie: *Visible Learning and Assessment*

Leslie Rutowski: *Increased Heterogeneity in International Assessments and Associated Measurement Challenges*

Steve Sireci: *21st-Century Validation Procedures for 21st-Century Tests*

Déon de Bruin: *Challenges of Psychological Testing in the Multicultural South African Context*

Maryam Wagner: *Examining the Potential and Uses of Cognitive Diagnostic Assessment in Test Development and Validation.*

I also noted that a final keynote, the Thomas Oakland lecture, titled *My Personal History of Item Response Theory*, was delivered by Ronald Hambleton. That presentation, of course, was...
typical of the quality and significance we have all come to understand is the very person of Professor Hambleton. I do not know any psychometricians who do not wish that they had taken IRT courses from Professor Hambleton.

One keynote presentation needed to be cancelled at the conference because the presenter, Sara Ruto, was not able to attend due to travel difficulties. It was a remarkable set of keynotes. I heard people discussing every single one of them in the halls after the talks. They were informative and thought provoking. The nature of the professional development that occurred at the conference is something of which we should all be proud. Of course, at many of the paper presentations and posters sessions there was also considerable learning and perhaps even more interchange among members. Moreover, the number of graduate students who participated in the meeting demonstrated the professional development capacity of the conference, although for many of us who have completed our terminal degrees, the professional development opportunities were just as prevalent.

Before closing, I would like to mention a few other people who are important to the ITC. First, we missed two people horribly at the conference. Our office manager (and all-round organizer and “fixer” of the association), the only employee of the association, Ananda von Tonder, was recovering from some health concerns in England and was not able to attend. She has continued working for us throughout a long illness and convalescence, and keeps us on target. We look forward to having her pleasant and professional personage and spirit at the 2020 conference in Luxembourg. She is already providing guidance to the newly installed president and others, I can assure you. Our immediate past president, Professor David Bartram, was also unable to attend due to health issues. He was named a fellow and has already promised to provide his Fellow Keynote Presentation at the 2020 ITC Conference in Luxembourg. As an added bonus, Dr. Barbara Byrne, our long-term member and treasurer, also was named a fellow. We expect both Drs. Bartram and Byrne to provide outstanding keynote presentations in Luxembourg and for many of us, our intellectual curiosity is already experiencing anticipatory salivating, just as Pavlov’s dogs did for more material rewards.

As a final note, I would like to welcome a few people to new roles. We have added a new President-elect, Aletta Odendaal of the University of Stellenbosch in South Africa; a new Secretary General, Paula Elosua from the Universidad del Pais Vasco, San Sebastian, Spain; and a new Treasurer with the appointment of Dr. April Zenisky from the University of Massachusetts-Amherst. In addition, our new Testing International newsletter editor, replacing Dr. Zenisky, is Dr. Nicky Hayes, and Dr. Stephen Stark was appointed Editor of the International Journal of Testing.

From here in the northern hemisphere, I wish you all a great academic year, if you work in that setting. To all, I hope that you will begin thinking about all the knowledge you can share in Luxembourg! Future columns will describe the many things about which we can look forward in Luxembourg and at the next ITC conference. In the meantime, please enjoy this Testing International and the International Testing Journal.

Kurt Geisinger
Buros Centre for Testing / University of Nebraska
Hello Everybody!
This is my first attempt as the new Editor of Testing International, so I'd like to begin by expressing my heartfelt thanks to our previous Editor, April Zenisky, both for her work on the newsletter over the past two years, and also for her help and support to me as I take on the task. If the layout seems a bit familiar, that's because I'm following the highly attractive pattern which April established: I doubt if I could do better. April now takes on the demanding job of ITC Treasurer, and I hope everything goes smoothly for her.

In this issue, we have a report from the highly successful conference in Montreal in July. As the pictures show, this was a most enjoyable event, with a wide range of participants from across the globe. I'd like to repeat our thanks to Nathalie Loye, for organising the conference.

This issue includes an interesting set of reports from various ITC committees, highlighting the valuable work carried out by the ITC and its members in so many different areas. We have a book review, and Dragos Iliescu continues our set of early leader interviews, with an interview with Dave Bartram, a major influence on the development of the ITC.

I'd also like to call your attention to what I hope will become the first of a series of informal, opinion-based articles discussing testing and test matters. This is the feature article in this issue - a discussion piece by Lara Montefiori about gaming and gamification. It’s a development which is happening across the testing field, and which has implications for us all. I hope Lara’s piece will stimulate informal discussion and comment in future issues of Testing International.

Happy Reading!

Nicky Hayes
The 11th ITC Conference  
Montreal, Quebec, Canada, July 2018

A well-attended conference included 150 oral presentations, 30 symposiums, and 2 poster sessions displaying a total of 40 posters, with 407 delegates from 47 countries. The most popular themes for oral presentations were educational measurement, large-scale assessment, and measurement in psychology.

Keynote presentation by Stephen Sireci

The Whova app

During the conference, the social app, Whova, proved an efficient way to contact delegates: with an install rate over 80%, the app quickly became the go-to mode of communication. Among other things, delegates used it to post pictures, make spontaneous dinner plans, and even find lost belongings.

Student awards

Every two years, the ITC student awards highlight the two best conference papers submitted by students. The 2018 awards went to:

Joshua Prasad – “Culture as a Determinant of Option Choice in a Situational Judgment Test: A New Look”

Jorien Vugteveen – “Using the Dutch multi-informant Strengths and Difficulties Questionnaire (SDQ) to predict adolescent psychiatric diagnoses”

The Thomas Oakland Lecture was delivered by Professor Ronald K. Hambleton

2016 Thomas Oakland awardee Ronald K. Hambleton

Our attendees

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<th>Registrations by country</th>
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<tr>
<td>United States</td>
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<td>Canada</td>
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A very fine jazz dinner
The conference dinner was sold out, with 205 attendees. Last-minute dinner tickets were very sought after indeed—some delegates even attempted to buy or sell extra tickets using the social networking app! The event took place on the rooftop terrace of the Hyatt Hotel, overlooking the main stage of the jazz festival. Between the concerts, the conference dinner had its own jazz trio, Masson Stomp, playing new compositions as well as standards from the Swing and New Orleans traditions.

Masson Stomp. Photo credit: Catherine Aboumrad

A group of competent, energetic and informative volunteers made the event easy and pleasant for everybody.

Walk and run social event
A few courageous delegates braved the extreme heat (over 40 Celsius) for a 5km run or a 3km walk in downtown Montreal.

Our thanks go to Nathalie Loye and her team, for their splendid work in organising and running the conference. Well done Nathalie!
The report on the International Journal of Testing by Steve Stark is contained elsewhere in this newsletter. The journal continues to publish excellent research on a variety of testing issues related to the global use of tests.

We have continued to work on expanding the volumes in our book series. This September the book on “Measuring opportunity: Insights from international large scale assessment” by William Schmidt and colleagues. Previous publications include “Adapting tests in linguistic and cultural contexts by Dragos Iliescu and “International applications of web-based testing: Challenges and Opportunities” by John Scott, Dave Bartram and Douglas Reynold. We also expect two additional volumes will be published this next year: “Assessing measurement invariance for applied researchers” by David Wells and “Higher education admission practices: An international perspective” edited by Maria Elena Oliveri and Cathy Wendler.

We also just received news that Cambridge University Press will continue to publish the series for an additional two years and that they have approved a volume by Sumaya Laher titled The International History of Psychological Assessment. We continue to seek volumes on other topics; if you have a topic you would like to explore with me, please let me know and I will provide feedback and help with the proposal process. We are definitely pleased with the published volumes and those in various stages of preparation.

The ITC International Handbook of Testing and Assessment


The ITC International Handbook of Testing and Assessment addresses the many challenges facing the cross-cultural applications of psychological and educational testing in this era of globalization. It represents and showcases the concerted efforts of the ITC in tackling the wide range of problems and complexities in international psychological testing; and provides information and resources to help guide professionals and graduate students regarding testing and assessment from an international and global perspective.

Adapting Tests in Linguistic and Cultural Contexts

Dragoș Iliescu


Adapting tests to various linguistic and cultural contexts is a critical process in today’s globalized world. Test adaptation is a scientific and professional activity reaching across the social and behavioural sciences, and requires a combination of knowledge and skills from psychometrics, cross-cultural psychology and other areas. Dragoș Iliescu gives a step-by-step approach to cross-cultural test adaptation, emphatically presented as a mélange between science and practice. The practical experience of the author in a large number of test adaptation projects in various cultures is supported by a consistent scientific body of knowledge on the topic, accumulated over several decades. The first of its kind, this text offers an in-depth guide to why and how to adapt a test to a new culture, in such a way as to preserve its psychometric value.
The International Journal of Testing (IJT) is dedicated to the advancement of theory, research, and practice in the areas of testing and assessment in psychology, education, counseling, organizational behavior, human resource management, and related disciplines.

IJT publishes original articles addressing theoretical issues, methodological approaches, and empirical research, as well as integrative and interdisciplinary reviews of testing-related topics and reports of current testing practices. All papers are peer-reviewed and are of interest to an international audience. In 2017, IJT’s CiteScore based on values from Scopus was .76, and so far in 2018 the journal has received 100 new manuscript submissions. The journal is published quarterly, with each issue containing 4-5 articles.

In recent years, IJT has published special and themed issues on a variety of topics, including assessment of linguistic minorities, cognitive diagnosis modeling, noncognitive testing with interviews, biographical data, and situational judgment tests. An issue guest edited by Drs. Robert Mislevy and Maria Elena Oliveri, on “Challenges and opportunities in the Design of Next Generation Assessments of 21st Century Skills” is due for release in the spring of 2019.

IJT has also published the ITC Guidelines on a variety of testing topics, and these are among the most highly downloaded and cited articles. For example, the ITC Guidelines for Translating and Adapting Tests (Second Edition) has been downloaded from the journal website 490 times since being published online in December 2017.

Collectively, the ITC Guidelines provide helpful information and recommendations for practice in areas that complement what is covered in the American Educational Research Association (AERA), American Psychological Association (APA), and the National Council on Measurement in Education (NCME) Standards for Educational and Psychological Testing, as well as the Society of Industrial and Organizational Psychology (SIOP) Principles for the Validation and Use of Personnel Selection Procedures.

For 2019, we aim to increase the number of new manuscript submissions, to reduce the time manuscripts are under review, and to increase citations of published articles. To increase submissions and citations, we will explore a “Target Article and Commentary” format for one issue, wherein an author is selected to write an article on a topic of broad interest that espouses a position or makes recommendations that are likely to generate discussion. When the article is ready, there will be a call for commentaries with a four-week window for submission. The commentaries will be reviewed and a select number will be chosen for publication in conjunction with the target article. If you have a topic and would like to be considered as a “target article author”, please contact me by email (sestark@usf.edu).

To shorten the manuscript review process, we must increase the number of regular reviewers and add to our editorial team. Please contact me if you are willing to review for IJT, or if you would like to nominate someone for our Board of Consulting Editors. (Self-nominations are also welcome.) To be selected for the editorial board, a nominee must have an accomplished record of publication and expertise in measurement/testing methodology and practice. To expand the journal’s outreach and international impacts, we encourage nominations of individuals from underrepresented groups, cultures, and regions beyond North America.

Stephen Stark
Editor of International Journal of Testing
University of South Florida
Call for Nominations
Editor of Practical Assessment Research and Evaluation

The ITC is looking for nominations (self or other) for an editorial team for the journal Practical Assessment Research and Evaluation. This journal is currently mainly concerned with the educational applications of testing. Its editor, Dr. Rudner, is hoping to retire soon, and the ITC is exploring the possibility of taking over. If we do, we would hope to expand its coverage to other practical applications of testing, such as health care, organizational psychology, human resource issues and other areas in which tests are used and applied to understand human behavior. We therefore hope to attract an editor who can lead a team of associate editors with experience and interest in various applications of psychology.

Specifically, we are envisioning a team of three: an editor and two associate editors—one from educational assessment, one from industrial/organizational psychology, and one from clinical psychology, which can oversee the review of manuscripts from these different areas. These editors will be able to appoint editorial board members with expertise complementing his/her own portfolio.

PARE is an open access journal, and the editor can expect to handle various administrative tasks including managing the journals’ website and uploading successful articles, as well more traditional editorial duties such as establishing an editorial board, assigning reviewers, and writing decision letters. The journal is currently supported financially by sponsorship and the editor should expect to secure existing sponsorships and to acquire other sponsors consistent with the broadened scope of the journal.

Successful candidates should have a record of significant scholarly activity, be able to manage people and activities in a timely and competent manner, and be welcoming of test applications in diverse areas.

Applicants can apply for one of the three categories (education, I/O, or clinical), or propose a team of editors to lead the Journal.

Information regarding the journal and its current publications can be found at www.pareonline.net. Neal Schmitt or other members of the search committee: (Kurt Geisinger (kgeisinger@buros.org) and Steve Sireci (sireci@acad.umass.edu) will be happy to answer any questions you may have.

Nominations should be sent to Neal Schmitt (schmitt@msu.edu) by 31st December 2018. They should include a letter stating relevant past experience and expertise, and explaining interest in and vision for the journal, a CV and three letters of recommendation. The letter may also suggest associate editors who would handle the different areas targeted by the journal.
Creating international networks

Psychological tests are support tools that assist psychologists during the decision making processes of their daily work. These are decisions which affect people as well as institutions, to a lesser or greater extent. The validity of test score interpretations rely on their scientific quality and proper use, but correct use requires professional training and test availability. Both the availability of psychological resources and using tests correctly are crucial aspects for the development of psychology. However we do not know much about the status of those issues in many countries and regions.

The important role of the tests in professional practice and in the development of psychology is clearly recognized, but their availability and use is significantly different among the more than 220 countries in which it is used (Oakland, 2004). There are several international studies conducted in Europe that have evaluated practices and attitudes related to the use of tests from an international perspective (Muñiz and Bartram, 2007; Muniz et.al, 2001; Elosua, 2012; Elosua and Iliescu, 2012, Evers et.al, 2012). The results, in unison, highlight the positive attitudes of psychologists towards the use of the tests, the need for training, and the recognition of the roles that tests play as knowledge generators in psychological assessment.

The pioneering research studies into test use in some Latin American countries (Contini, 2013; Wechsler, 2013; Wechsler, et.al, 2014; Vinet and González, 2013; Schumeyer, Lopez and Ortuño, 2013) have highlighted deficiencies related to the development of psychological assessment which can be associated with a lack of training of psychologists, and with the limited availability of questionnaires properly adapted to the idiosyncrasies of each language or culture. "The lack of availability of tests leads, on many occasions, to testers "adapting" tests without following the guidelines launched by international bodies such as the International Test Commission resulting in validity and bias problems. (International Test Commission, 2017; Muniz, Elosua and Hambleton, 2014)

The main goals of the ITC are to promote effective testing and assessment policies, and the proper development, evaluation and uses of educational and psychological instruments. In line with this, one of the projects which ITC is supporting is the creation of a network of professionals interested in testing and assessment in Latin-American countries. Among the initiatives promoted, we include an international study designed to obtain accurate, timely, and reliable data about the situation of testing in our partner countries. One of the objectives of this research is to compile information about test use and attitudes towards tests in those countries. So far, the partner countries in the first step of the study are: Argentina, Bolivia, Brazil, Colombia, Chile, Guatemala, Mexico, Peru, Portugal and Venezuela. The study is being carried out in cooperation with Psychological Associations, Universities and Scientific Organizations in those countries.

Information is being collected related to the most commonly used test, the difficulties associated with test use, and the attitudes of professionals of psychology toward tests and their use, using a single questionnaire specifically designed for this purpose. So far, data from 5887 psychologists have been
recorded. One of the most important findings is that 97.61% of the psychologists think that, as long as tests are correctly used, the information provided by test scores are a significant help in psychological assessment. With this evidence, we are in a good position to begin to describe strengths and weaknesses about test use, which can be helpful to psychological bodies in the development of psychology.

References


Participation of the ITC in international conferences

The International Test Commission participates in international conferences around the world, as part of its mission to share best practices in testing and assessment.

During the last year ITC representatives have taken part in the following conferences:

The 2017 Regional Conference of Psychology (RCP) which took place in Hanoi, Vietnam (the ITC was a co-sponsor)

The 2018 Brazilian Psychological Assessment Association Conference, held in Minas, Brazil.

The 1st Pan African Psychology Union Congress, 2017, held in Durban, South Africa
It was a delight to meet several of you at the ITC Montreal conference: a great conference in so many different ways. Thank you Nathalie, and all your tremendous team. Now you readers can begin preparing for your involvement with ITC Luxembourg in 2020!

There are 3 key objectives for the MIM committee over the next few months, and I shall address these each in turn.

1. **Membership fees**
   In liaison with Ananda van Tonder (ITC Office Manager) and April Zenisky (ITC Treasurer), we are striving to secure outstanding 2018 membership fees. I suspect some of you have misplaced the email from December 2017 (from ITC Webmaster no doubt). I know I did overlook this email initially although thankfully the Australian Psychological Society (a Full Member) paid quickly on my forwarding it in May 2018.

   This is how we stand as at September 2018:

<table>
<thead>
<tr>
<th>Membership Category</th>
<th>Total Membership Numbers</th>
<th>Members Owing 2018 Fees</th>
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<tbody>
<tr>
<td>Full</td>
<td>26</td>
<td>62%</td>
</tr>
<tr>
<td>Affiliate</td>
<td>80</td>
<td>50%</td>
</tr>
<tr>
<td>Individual</td>
<td>350</td>
<td>38 people have paid, with balance having fees waived due to ITC 2016 attendance, or ITC Fellows</td>
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   Let's reduce the dues owed – rapidly. Please check your emails from early December and check your ITC account (if a Full or Affiliate ITC contact).

   - **To pay online you will require:**
     - Your login name (probably your email address)
     - Your password.

   If you have any difficulties, please contact Ananda: secretary@intestcom.org

   Ananda will be generating follow up emails soon, but please do not wait. Further, some of you are being contacted by me directly. With the 2019 membership invoices to be sent in December, and the ITC Council being responsible for prudent management of ITC (member) assets, your prompt action on this matter would be appreciated.

   The organising committee of Luxembourg 2020 will soon be seeking initial funds from April (ITC Treasurer) – and every membership receipt helps us address any potential cash flow issues.

2. **Professional Events**
   In fostering or supporting relevant professional events around the globe, it would be great for the ITC to be more aware of such so that these may be listed (if not promoted) on the ITC website, or within Testing International, this newsletter.

   Please send your suggestions to: secretary@intestcom.org

   Ananda van Tonder (Office Manager) or Paula Elosua (Secretary-General) can then direct your email for action.
Recent conferences of likely appeal to our readers have included: E-ATP (Athens); JART (Tokyo); International Association for Educational Assessment (Oxford, UK). Our next issue in 2019 should provide an update on the 2019 iterations.

Here are some of the offerings that are available in various regions over the next few months:


ASIA: 13th Cross-Straits Conference on Educational and Psychological Testing (CSEPT 2018) 19 – 21 October 2018, Taizhong, Taiwan, China (Sponsored by the Psychological Testing Committee of the Chinese Psychological Society and Taiwan Chinese Testing Society.)

EUROPE: XVI European Congress of Psychology (ECP 2019) 2 – 5 July 2019, Moscow, Russia

MIDDLE EAST: 3rd Annual Middle East Psychological Association (MEPA) Conference 14 – 16 March 2019, Kuwait

NORTH AMERICA: 60th IMTA Conference International Military Testing Association 15-19 October 2018 Kingston, Ontario, Canada

SOUTH AMERICA: 9th National Conference of Psychological Assessment 25-28 June 2019, Salvador, Brazil

[Apologies to those not mentioned. Do tell us if you are aware of other forthcoming events.]

3. Membership Survey

It has been 5 years since an ITC member survey was conducted, with Dragos Iliescu (Past President) producing a great report to help guide the ITC. Of course, much has happened in the testing and assessment world since then and it is time to update our grasp of the demographics of our membership and your views on the ITC and how we can improve, and serve you better.

In 2013 we had 161 participants from 39 countries. There were three ‘outputs’ from the ITC that were clearly appreciated and this information has helped guide our thinking.

➤ Please look out for this member survey over the next few months but first please ensure that your organisation has paid the 2018 ITC dues!

Peter Macqueen, Brisbane, Australia
p.macqueen@compassconsulting.com.au

The above photo is from the recent 2018 APS Congress in Sydney. Pearson, a Diamond sponsor at ITC 2018, kindly agreed to freely display multiple copies of our ITC brochures: Luxembourg 2012 and ITC membership.
The Research and Guidelines Committee has had a productive year, with another set of guidelines released recently and another one scoped for future development.

**Newly released**
The [ITC Guidelines for the Large-Scale Assessment of Linguistically and Culturally Diverse Populations](#) are now available for download from the ITC website. The document extends our existing portfolio of best practice guidelines for testing across languages and cultures, with the particular focus on large-scale assessments in education. Our big thanks go to René Lawless and María Elena Oliveri from ETS who were lead authors and served as subcommittee chairs for this project. We also thank colleagues in and outside of the ITC Council who contributed ideas and writing and provided feedback on earlier drafts. We are particularly grateful to our individual and organisational members who responded to the public consultation and provided critique, comments and suggestions, all of which have helped creating a better set of guidelines:

- Agustin Tristan (Mexico); Richard Justenhoven (UK); Winsome Alston (USA)
- BPS Committee on Test Standards (UK); cApStAn (Belgium); COTAN (The Netherlands); National Center on Educational Outcomes (USA); SHL (UK, USA)

**In development**
In the last newsletter, I reported on initial difficulties and setbacks in our initiative to revise the Guidelines on Computer-Based and Internet Delivered Testing (2005), to bring them up to date with the rapid changes in assessment technology. We are very happy to announce that the International Test Commission and the Association of Test Publishers (ATP) are partnering to create new [ITC-ATP Guidelines for Technology-Based Assessments](#). This collaborative project aims to draw upon both the ITC Guidelines for Computer-Based and Internet Delivered Testing (2005) and the ATP Guidelines for Computer Based Testing (2002), and produce up-to-date advice and guidance on how to best ensure fair and valid assessment in a digital environment. The scope of these new guidelines is ambitious, including design, delivery, security and accessibility of “technology-enhanced items” and technology-driven testing environments and algorithms. To direct the development, we have assembled a Steering Committee representative of both organizations, chaired by John Weiner (ATP) and Stephen Sireci (ITC). There are six additional members; three represent ITC (Kadriye Ercikan, Dragos Iliescu, and April Zenisky), and three represent ATP (Alina von Davier, Alex Tong, and Linda Waters). The committee will be soliciting input and expertise from many people internationally representing various stakeholder groups (e.g. test users, test developers, test takers, legal specialists etc.).

We hope you feel excited about the development of these long-awaited guidelines, and will get involved by providing your input or feedback at various stages of the project. Many thanks for your ongoing support, and I am looking forward to working with as many of you as possible.

Anna Brown, chair
a.a.brown@kent.ac.uk
1. During what year did you become involved with the ITC, how did this affiliation occur (e.g. were you asked to join the ITC, were you a representative of another organization, or did you elect to become involved), and what was the nature of your initial work on the ITC?

I was voted in as an ordinary member of Council at the ITC’s General Meeting in 1994, held at the IAAP 23rd Congress meeting in Madrid. At that time, I knew very little about the ITC and it is fair to say that the ITC did not have a high international profile at that time. Prior to my election, I had been approached by Ken Miller and John Toplis who told me about the ITC and who encouraged me to get involved in the Council.

Ken Miller had been president elect from 1978-1982, president from 1982 to 1986 and past-president from 1986-1992. He was succeeded as president by Jac Zaal (1986-1990) and then Ron Hambleton (1990-1994). John Toplis had been Secretary and Treasurer through to 1994. In 1994, when I joined the Council, John Keats took over as president with Ron Hambleton as past-president and Tom Oakland as the new president elect. Both Ken Miller and John Toplis had stood down from Council by this time.

2. What were your initial impressions of the ITC, including its organizational structure, missions, and personnel?

Ken Miller and John Toplis had expressed concerns to me that the Council was becoming very focused on US interests with respect to educational testing and certification using IRT models. It was apparent from the first meeting I attended of Council that there was tension between some of the members and this expressed itself in occasional open conflict between the then president, John Keats, and other members of Council.

3. Every organization and association goes through growing pains. During your first few years on the Council, what were some of the impediments that you felt limited the ITC’s work and needed to be changed?

In 1994 I was working in the Psychology Department at the University of Hull. I had developed a range of computer-based tests for occupational use and had been developing test standards, test review procedures and test user qualifications through my work with the BPS Test Standards Steering Committee. It seemed clear to me that the ITC was at a potential turning point where it could either remain...
focused inwards on issues of interest only to members of Council, or it could start to take on a role of supporting international testing and assessment initiatives. A significant step in this latter direction had been taken by Ron Hambleton in his leadership on the development of guidelines for test adaptation. I resolved to support and assist this movement and initiated a project to develop international guidelines for test use.

In 1998 I was nominated as president-elect of the ITC and in the same year moved from my position of Professor of Psychology at the University of Hull to one of International Research and Development Director for SHL, a UK-based company that specialized in employment testing. I agreed to be ITC President if the ITC reduced the term from 12 years to 6. The ITC had adopted the IAAP model of people needing to commit to 4 years as president-elect, followed by 4 years as president followed by 4 years as past-president. We agreed to reduce the terms and I was President Elect from 1998 – 2000, President 2000 – 2002 and Past-President 2002-2004.

4. What were the main activities you were attracted to in the ITC?

As President-elect I worked on membership issues and, with Tom Oakland, introduced the enfranchisement of affiliate member organizations. In my inaugural statement in 2000, I said that I planned to:

1. Develop guidelines for the use of computer-based tests. In particular, guidelines covering good practice in the use of the Internet for testing.

2. Develop the ITC website as a key information and advice center about tests and testing. I wanted us to gain the sponsorship needed to manage a testing portal, through which access to professional associations, publishers, user groups and other relevant bodies could be obtained.

3. Work with EFPA on the development of test review criteria and exploration of the possibility of coordinating a technical ‘benchmarking’ review process for tests.

4. Increase the ITC involvement in and sponsorship of conferences and symposia on testing issues.

In 2001 I produced and published the first ITC website and in 2002 organized the Winchester conference. This was a great success both scientifically and financially. It initiated a radical change in the ITC’s strategy heralding the introduction of the ITC as an outward-looking member-based organization focused on international standards and guidelines, with individual as well as organizational members.

I developed our current ‘business model’ of having a regular biennial conference as a source of income as well as to support our work on developing guidelines. Prior to the Winchester conference we used to rely solely on membership dues from a small number of member organizations.

I was also pleased to lead on two guidelines projects: International Guidelines for Test Use and (co-lead with Iain Coyne) Guidelines for Computer-based Testing and the Internet.

From 2004 to 2010, I sat on Council as the IAAP Liaison Member and then from 2010-2012 was ITC Secretary-General. From 2012 to 2018 I was honored to have been invited to serve a second term as President
followed by a 2-year co-option – stepping down from Council in 2018.

Over this time, as well as my work on developing test standards through various BPS projects, I was the Convener of the EFPA Standing Committee on Tests and Testing and the successor body, the Board of Assessment, from 2004 until 2013 and President of the International Association of Applied Psychology (IAAP) Division 2 from 2002-2014. These positions allowed me to lead the development of projects that had consistent standards and approaches to standards across diverse national and international organizations, culminating in the work with ISO on the international standard on assessment in organizations: ISO 10667. Many of the international technical experts involved in this ISO project were current or past members of the ITC Council.

5. What prominent changes have you seen in the ITC between when you first were a member and now?

I’m fortunate to have been involved in the ITC during a period of very positive growth over the past two decades. We now have a regular biennial conference that has developed a strong following of individual ITC members; we are involved in a range of publishing activities, including our journal, our newsletter and various book series; and we continue to produce new guidelines and documentation to support international applications of tests and testing. We have become much more proactive in trying to reach out to countries where testing technology is less well developed. We have worked with colleagues in Africa, Asia and South America, supporting local conferences, and providing workshops and other inputs to help assist local and national initiatives.

6. Where has the ITC done well? What do you think the ITC’s biggest accomplishment has been over the years?

I think the ITC’s biggest accomplishment has been in the development and promulgation of its guidelines. Its major challenges have always been around the issue of resource and getting people with the necessary experience and expertise who are willing and able to give of their time ‘pro bono’. I have been fortunate in working for employers who were happy to back me in devoting my time to professional standards issues.

7. What do you perceive to be current challenges facing the ITC and what role should the ITC play in this regard?

As we move forwards, I believe the greatest challenges we face will be the increasing use of the internet as the medium for test content delivery and the consequences that has on the need for international agreement on standards.

It is vital that the ITC continues to work collaboratively with practitioners and academics and involves the testing industry in its projects. We need to ensure that basic psychometric principles are followed in the construction and delivery of tests as well as encouraging creativity and innovation in the design of tests.

21st July, 2018

Dave Bartram was interviewed by Dragos Iliescu
One of the things which differentiates a "proper" psychometric test from any of the numerous "micky mouse" tests circulating freely round the internet and other circles, is its careful construction. A psychometric test is so much more than simply a set of questions giving a result. It rests on a massive foundation of psychological knowledge and expertise, ranging from the complexities of deriving appropriate test items, to the statistical techniques involved in combining and analysing scores, and on to the norms and principles involved in interpreting their results.

Teaching those skills is a complex task. I am no longer personally involved in teaching psychometrics, but if I were, this is definitely the textbook I would choose for my course. It covers, in a readable and accessible way, the principles and procedures involved in selecting, using, evaluating and developing tests. It's well-grounded, clearly written, and thorough.

It's also accompanied by a set of 31 exercises and spreadsheets, with data downloadable from the book's website and adapted for different operating platforms. This allows students to explore what their learning means into practice, covering matters such as scoring Likert scales, exploring correlations, transformed item difficulties, factor rotation and hierarchical factor analysis. Just about everything you would need for your course!

It does more than that, though. It's too easy, when we are teaching psychometrics, for us to focus on established practices and procedures, and to shy away from more controversial matters. Which is fine, right up until one of our brighter students discovers Michell's critiques, or something similar, and decides (wrongly but enthusiastically) that everything we have been teaching is rubbish. Better, I think, to tackle these issues directly from the start, and Cooper's book does exactly that. The author doesn't shy away from these controversies: he meets them head-on and discusses them seriously; showing the student that problems and challenges exist, what they are, and how we can deal with them in practice.

It's not a weakness: psychometrics is a science, and as in most other sciences, is not without its controversies. Challenges have been raised with regard to almost every aspect of test development, from item scaling to factor identification, and those challenges make valid points. But they don't mean that everything we do is invalid, and I believe that being aware of these controversies only strengthens our discipline. They teach us not to be complacent: to think through our decisions and be aware of pitfalls. They remind us of the hard lesson we learned when we first began to study psychology: that nothing is completely certain, and as psychologists we evaluate evidence rather than apply absolute facts. And they force us to look continually for ways to improve our practice, and the procedures we apply when we are developing tests.

For this reason, I'd recommend this book to practising professionals as well as students. It's a useful reminder of procedures, as well as a clear exposition of the challenges. If I were looking for a weak point, I'd say it's a bit short on gaming and the gamification of tests, but given the relative recency of this area, the author can be forgiven for a very light treatment of the topic - perhaps that's something for a future edition! Overall, though, this book provides a thorough coverage of major procedures, and a helpful summary of significant controversial issues. It's also, in itself, an interesting read!

Nicky Hayes
Discussion article

Game, Set, Job Match! What’s in a game?
by Lara Montefiori

You are applying for your dream job, and everything goes as expected. Then, as you get through the first stage of the selection, you are invited to play a game. A game? To apply for a job? Chances are that you have played one before but this, this is a high-stakes situation, and a game is the last thing on your mind. As much as this sounds exciting, you wonder how an ostensibly recreational game may understand you deeply enough to paint an accurate portrait of your hidden talents. You worry about your last indiscretions on Fortnite but you also confide in the myriads of candies you have crushed on you commute. What will the game pick on? Will you be able to game the game? Why games anyway?

After reading the word game 9 times (no need to check!) your brain is significantly more likely to interpret the word match as an encounter between two teams than as an aid to light your candle. It’s science – cognitive science: it’s the way your brain works. And this is exactly the kind of science that a new breed of test publishers uses to develop this new wave of assessment. In fact, let’s just stop calling them games altogether, they are full-fledged assessments in their own right. Gamified Assessments and Game-Based Assessments exploit game technology to assess individuals, but they are not games. Subtle yet important difference. But still, why games? Well, many reasons.

First, it is important to understand the context in which this type of assessment has found its raison d’être. Gamification – commonly defying a stable definition but essentially referring to applications of game technology to non-game contexts – is a fast-moving field that has penetrated the bubble of workplace selection in the last decade or so. It is the generational backdrop against which assessment has become increasingly game-like, forever blurring the boundaries between work and play. Gamification is not a type of assessment itself, but more of a “syndrome” whereby different elements in the selection process, from attraction to onboarding, are adapted to mimic, include, or exploit game mechanics and elements. Some gamification efforts may include points, some others include leaderboards, some may be more or less subtle or targeted than others. The possibilities are vast.

Psychologically speaking, each of the different game elements tap into different psychological processes. And this is one of the reasons why gamification is important. It’s easy, for example, to imagine how gamifying an assessment may increase fun, sense of competition, or sense of achievement. And it should be equally as easy to picture a clear link between those inner dynamics and a boost in engagement.

Also, while the academic literature is most certainly playing catching-up with the applied use of gamification in selection, evidence is starting to show a clear pattern of beneficial effects. For example, game elements can trigger a sense of flow which encompasses a combination of interest, concentration and enjoyment typical of work tasks that sit on one’s skillset-optimised combination of complexity and difficulty. When adequately sustained, flow equates to unleashing one’s full
potential, which is crucial for top performance, and, with that, competitive advantage. Core necessities for flow maintenance are clear goals, feedback, and the possibility of control—all of which are easily fostered via game elements such as leaderboards, points, and interactive options respectively.

As mentioned before, two kinds of assessment fall under the gamification jurisdiction: Gamified Assessment and Game-Based Assessment. Representing the simplest form of assessment gamification, Gamified Assessment sees traditional measures going through a makeover that adds game elements around their well-established and psychometrically-unadulterated assessment features. But there is much more than meets the eye, as the effect of the makeover is by far not just a cosmetic one. In addition to adding a substantial dose of fun and increasing both the perceived “coolness” of an employer and the chances of candidates applying for a job on offer, Gamified Assessments have recently showed some very important social implications. Comparing the same set of aptitude questions in their original and gamified forms showed a significant reduction of performance gap between women, non-white and lower socio-economic status individuals, and their male, white, better-off counterparts.

While isolating the cause of this has not yet been possible, two potential candidates are reduction of stress and reduction of stereotype threat—both of which are currently being investigated experimentally. The life-changing opportunities to perform afforded to currently-underrepresented groups are another very good reason why gamification is a welcome addition to workplace selection.

Taking things to a much deeper level, Game-Based Assessment shifts the application of game elements and mechanics from the peripheral features of the assessment to its core, thereby harnessing the psychometric properties of games. The assessment and the game become an indivisible unit, opening an unprecedented window on the test-taker’s patterns of decision-making, reactions, preferences, and biases. This is made possible, and relatively easy, by leveraging the accumulated evidence of several decades of advancements in cognitive, neuroscientific, and experimental psychology.

Incorporating this kind of evidence into the status quo of psychological assessment at work is an uncharted territory that doesn’t come free of challenges. First of all, the most rigorous cognitive tasks were originally designed to understand human cognition as a whole—an endeavour in which individual differences are treated as confounds and kept to the unavoidable minimum. This requires harvesting the same data from different task sources to develop a stable and theoretically-sound model of individual differences, while identifying and filtering out construct-irrelevant noise.

Second, the average end-user (whether intended as the Occupational Psychologist using the assessment, the client buying it, or the candidate completing it) may struggle to fully appreciate the link between button taps and personality constructs such as Self-Monitoring or Social Domiance, let alone Politeness.
This is because the cognition-personality link has yet to make its full debut in mainstream psychology and, understandably, the mechanisms underlying the input-output relationship may appear more obscure than they are. In reality, some of those mechanisms are as much of a cliché as seeing the glass half full or half empty and the link of that perception to optimism and pessimism. It is possible, for instance, to paint a rather accurate depiction of a person’s level of neuroticism by observing how positively or negatively they interpret neutral stimuli, or by comparing their reaction times to positive and negative stimuli.

Of course, there are many more than a couple of variables involved in any given score computation, and, often, the relationship between variables becomes too complex to explain in human language. But the bottom-line of Game-Based Assessment is that it is possible to isolate construct-specific clusters of data and combine them in a way that is not only psychobiologically-sound, but also so far detached from what is feasibly within conscious control of the test-taker that the assessment becomes completely resistant to distortion. This means that whether a candidate lacks the necessary self-awareness to accurately rate themselves or whether they intentionally try to modify their response, the assessment remains unshaken. Stable on its cognitive foundations and reliable, it provides an accurate and objective assessment of the individual, making the link between gamification and its benefits on organisational outcomes crystal clear.

And, of course, candidates like Game-Based Assessment more than any other form of assessment. Not just for the fun aspect, though. They like the idea that the assessment gets to part of their self of which they may not be fully aware, and they like the fact that other candidates will not be able to cheat. It’s fair play.

Assessment gamification swings from being a test anxiety-defusing accessory for traditional measures to being an enjoyable veneer for dry decade-old lab tasks, revolutionising the industry it challenges with strong psychometric rigour paired with fresh looks and a couple extra torques. Its few iterations will most certainly grow in number and in the breadth of application within and beyond the occupational realm, and, with the magnitude of data that Game-Based Assessment offers, the over-cited quote “You can discover more about a person in an hour of play than in a year of conversation” makes Plato seem very 2018.

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You may have your own opinions about gaming or game-based assessments. If so, Testing International would love to hear from you! Send your contribution (no matter how small) to the Editor, Dr Nicky Hayes, at newsletter@intestcom.org.