



SAS NSW User Group (SNUG)

SAS Certification Program

24 Nov 2011

Andrew Howell

ANJ Group Pty Ltd

My Background

- Independent consultant
 - 21 years IT, 12 years SAS
- SAS Melbourne User Group (SMUG)
 - Committee member
- SAS Accredited Trainer
- SAS Certified Professional



Agenda

- Why Certify?
 - Benefits
 - SAS Certification stats

- SAS Certifications
 - What's available
 - Requirements & examination criteria
 - Training / Certification bundles

- Clarification of SAS Certification
 - Misconceptions
 - Positioning SAS Certification

- Wrap up, thoughts, links & questions

What is SAS Certification?

***“.. validate the skills
and knowledge of SAS users
and partners..”***

Benefits to Employers

■ SAS Certification website:

- *Help managers differentiate the most qualified technical professionals and attract the brightest.*
- *By measuring an employee's knowledge of SAS software, you'll retain the best.*
- *SAS Certification increases individual and workgroup productivity levels, which will maximize the value of your workforce*

■ Piece of mind

- Differentiate potential employees
- Validate your investment in SAS personnel



Accredited Training

This is to certify that

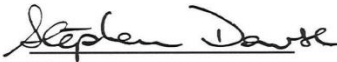
Andrew Howell

managed to stay awake for most of the

SAS Architecture and Deployment Workshop Course

held on the

29th to 30th November 2010


Instructor
Manager

The Power to Know.

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Benefits to SAS Consultants

- SAS Certification website:
 - *Increases your career opportunities and marketability*
 - *Enhances your credibility as a technical professional*
 - *Assesses your knowledge of SAS software*
 - *Allows you to earn industry validation for your knowledge*

- Validation your knowledge
- Public name recognition & referral list
 - SAS global & ANZ websites

- **Stand out !!**

SAS Global Certified Professional Directory



<http://support.sas.com/certify/directory/index.hspl>

How Jit, Hew	Malaysia		Kuala Lumpur	SAS Certified Base Programmer for SAS9
Howard, Demelza V	United Kingdom		London	SAS Certified Base Programmer for SAS9
Howard, Neil	USA			SAS Certified Clinical Trials Programmer using SAS9
Howe, Brian D	USA	CO	Broomfield	SAS Certified Base Programmer for SAS9
Howell, Andrew	Australia		Melbourne	SAS Certified Platform Administrator for SAS9
Howell, Andrew	Australia		Melbourne	SAS Certified Data Integration Developer for SAS 9
Howell, Andrew	Australia		Melbourne	SAS Certified Base Programmer for SAS9
Howell, Andrew	Australia		Melbourne	SAS Certified BI Content Developer for SAS 9
Howell, Andrew	Australia		Melbourne	SAS Certified Advanced Programmer for SAS9
Howell, Michael T	USA	CA	Sacramento	SAS Certified Base Programmer for SAS9
Howrigan, Shaun	Canada	ON	Mississauga	SAS Certified Base Programmer for SAS9
Hoy, Quinten G	Australia		Canberra	SAS Certified Data Integration Developer for SAS 9
Hozjan, Robert	Germany		Pforzheim	SAS Certified Base Programmer for SAS9
Hronsky, Milan	Slovakia		Bratislava	SAS Certified Base Programmer for SAS9
Hrytsay, Olha	Ukraine		Lviv	SAS Certified Base Programmer for SAS9
Hrytsay, Olha	Ukraine		Lviv	SAS Certified Advanced Programmer for SAS9
U... D...	USA	PA	Pittsburgh	SAS Certified Base Programmer for SAS9

List of Certified Partner Consultants (SAS/ANZ)



<http://www.sas.com/offices/asiapacific/sp/partners/certified.html>

The screenshot shows a Windows Internet Explorer browser window displaying the SAS Australia & New Zealand website. The page title is "Partners and Alliances | SAS Australia & New Zealand". The URL in the address bar is <http://www.sas.com/offices/asiapacific/sp/partners/certified.html>. The page content is organized into a sidebar on the left, a main content area, and a right-hand sidebar.

Partners

- Worldwide Partners
- SAS Alliance Programs
- Partner Directory
- Application Process
- Events
- Contacts
- PartnerNet (members only)

List of Certified Partner Consultants

The following are individual partner consultants who attain SAS Certification within a focus area. These individuals meet the experience and technical competency required to complete fundamental SAS implementation services. Please contact the SAS Partner Readiness Manager to engage or ask questions.

SAS/BUSINESS INTELLIGENCE CONTENT DEVELOPER FOR SAS 9

- Mark Bodt (Knowledge Warehouse)
- Brian Bee (Knowledge Warehouse)
- Colin Harris (Knowledge Warehouse)
- Andrew Howell (ANJ Group)

SAS/DATA INTEGRATION DEVELOPER FOR SAS 9

- Andrew Howell (ANJ Group)
- James O'Neill (Agility)

SAS/PLATFORM ADMINISTRATOR FOR SAS 9

- James O'Neill (Agility)
- Paul Homes (TekEds)
- Mark Bodt (Knowledge Warehouse)
- Colin Harris (Knowledge Warehouse)
- Andy Bowden (Knowledge Warehouse)
- Andrew Howell (ANJ Group)
- Adam Player (Team Player)

How Can We Help?

Need details on our software and services?

[REQUEST INFO](#)

CONTACT DETAILS

- Chris Tucker**
General Manager - Partners
Alliances@oz.sas.com
- Darrell Jones**
Partner Readiness Manager
Alliances@oz.sas.com
- Ed Harris**
Director - Alliances
Alliances@oz.sas.com

Sydney Head Office
300 Burns Bay Road
Private Bag No 52
Lane Cove NSW 2066
Tel: 2 9428 0428
Fax: 2 9418 7211

PARTNER ENABLEMENT

[Partner Certification Overview](#)

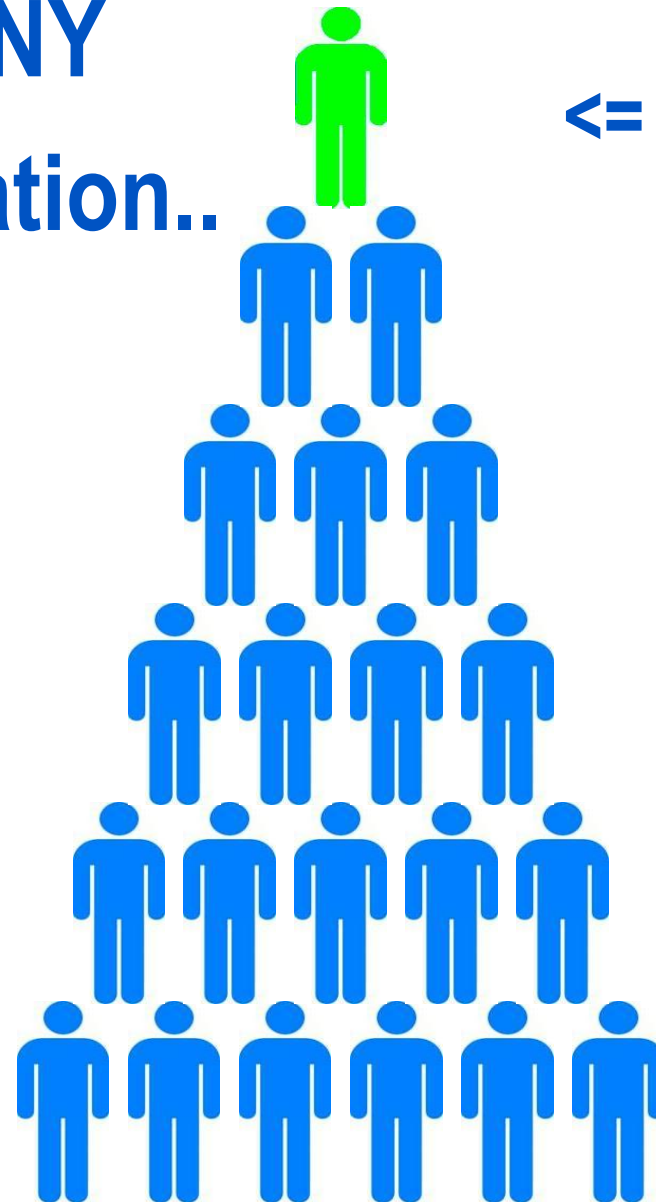
Certification Stats

- 19,500-26,000 Certified SAS Professionals globally
 - Australia: 232 SAS Professionals hold 307 Certificates

- How many SAS users worldwide ?!?
 - 50,000 SAS sites worldwide (*www.sas.com*)
 - Assume 10 users per site
 - 500,000 SAS users worldwide

- Only **3.9 % – 5.2 %** (1 in 20) of SAS Users are SAS Certified

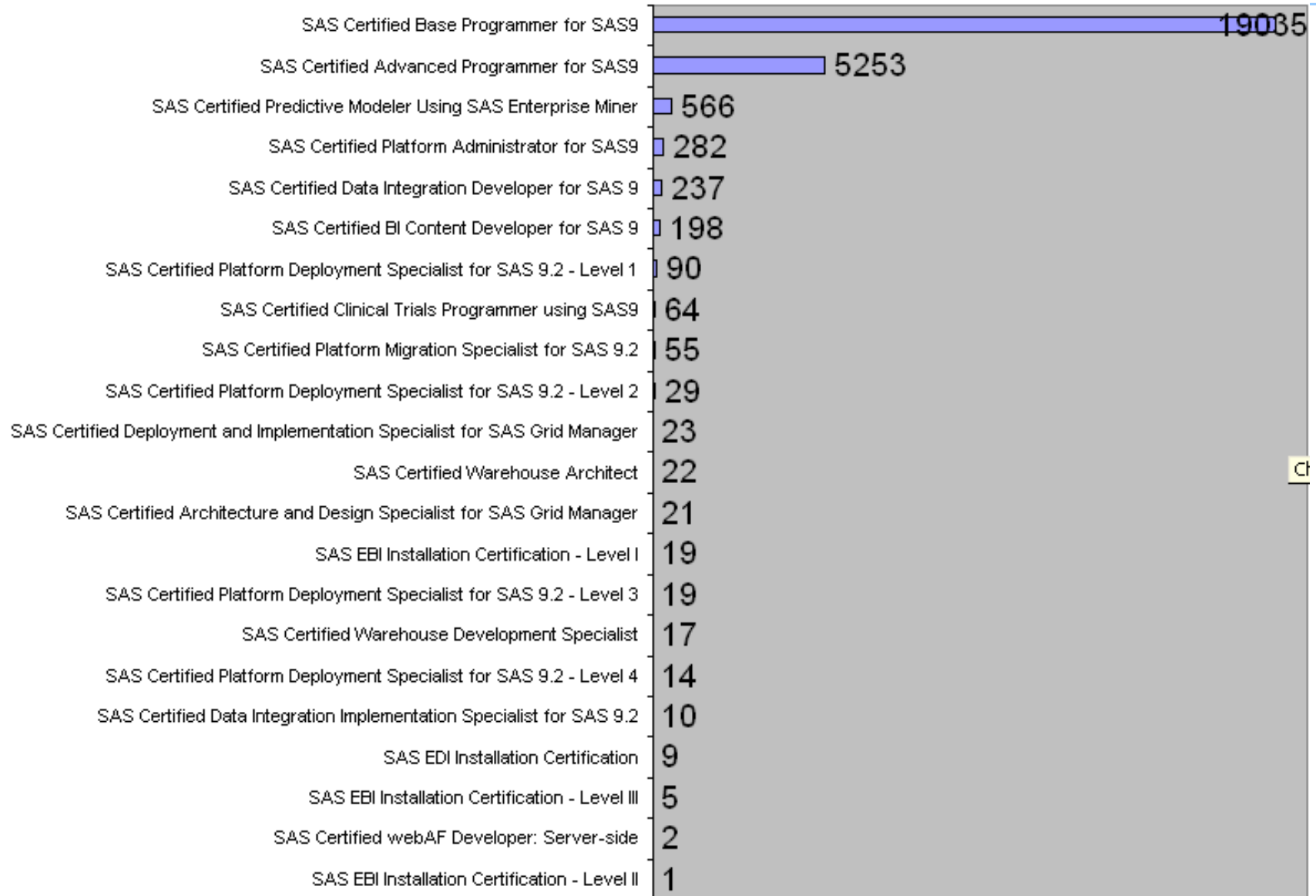
If you hold ANY
SAS Certification..



<= There's
you (1:20)

There's
<= every other
SAS user

Breakdown of Certifications

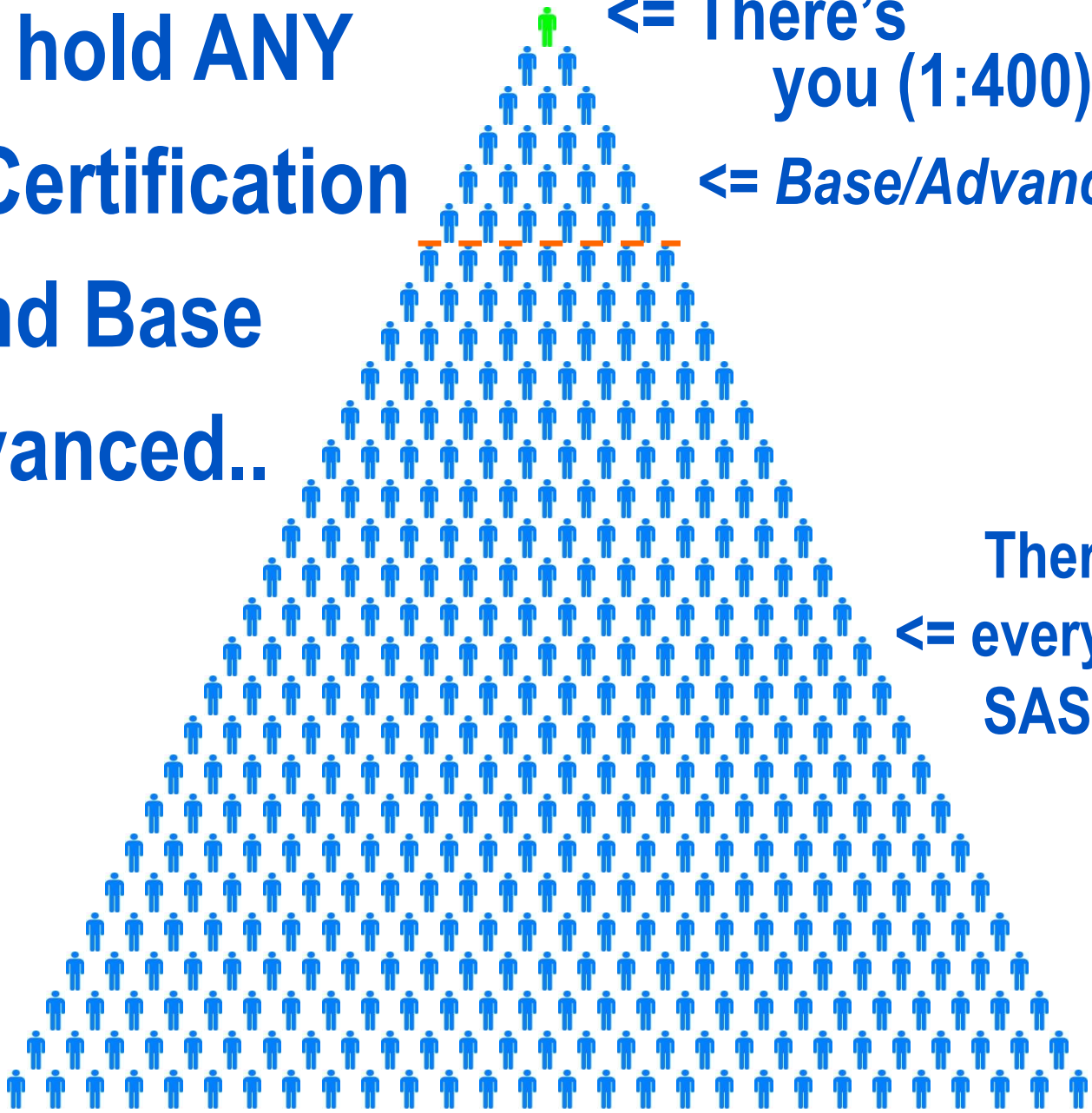


Beyond Base & Advanced..



- 1683 certificates worldwide
- 1266 professionals worldwide
 - 40 professionals Australia
- 5% of all certified professionals
- 0.25% of all SAS users worldwide

If you hold ANY
SAS Certification
beyond Base
& Advanced..



≤ There's
you (1:400)

≤ *Base/Advanced*

There's
≤ every other
SAS user

SAS “Examination” Certifications



- **SAS Certified Base Programmer for SAS 9**
- **SAS Certified Advanced Programmer for SAS 9**
 - *Pre-requisite: SAS Certified Base Programmer for SAS 9*
- **SAS Certified Clinical Trials Programmer using SAS9**
- **SAS Certified Platform Administrator for SAS 9**
- **SAS Certified Data Integration Developer for SAS 9**
- **SAS Certified BI Content Developer for SAS 9**

Run by
Prometric
www.prometric.com



SAS Certified Base Programmer for SAS 9

- 70 multiple-choice questions (65% to pass)

- Topics Covered
 - Accessing Data
 - Creating Data Structures
 - Managing Data
 - Generating Reports
 - Handling Errors

- Expected knowledge
 - Prog1 / Prog2 training courses, or
 - Equivalent experience

Run by
Prometric
www.prometric.com

SAS Certified Advanced Programmer for SAS 9

- Pre-requisite: SAS Certified Base Programmer for SAS 9
- 63 multiple-choice questions (65% to pass)
- Exam topics include
 - Accessing Data Using SQL
 - Macro Processing
 - Advanced Programming Techniques
- Expected knowledge
 - Prog3 / Macro / SQL training courses, or
 - Equivalent experience

Run by
Prometric
www.prometric.com

SAS Certified Clinical Trials Programming Using SAS 9

- 99 multiple-choice questions (70% to pass)

- Exam topics include
 - Clinical Trials Process
 - Clinical Trials Data Structures
 - Import and Export Clinical Trials Data
 - Manage Clinical Trials Data
 - Transform Clinical Trials Data
 - Apply Statistical Procedures for Clinical Trials
 - Macro Programming for Clinical Trials
 - Report Clinical Trials Results
 - Validate Clinical Trial Data Reporting

- Expected knowledge
 - Prog1 / Prog2 / Stat1 / Macro / RPro training courses, or
 - Equivalent experience

Run by

Prometric

www.prometric.com

SAS Certified Platform Administrator for SAS 9

- 65 multiple-choice questions (69% to pass)

- Exam topics include
 - Securing the SAS configuration
 - Checking the Status and Operation of SAS Servers
 - Monitoring, Logging, and Troubleshooting SAS Servers
 - Backing Up the SAS Environment
 - Administering Users
 - Administering Data Access
 - Securing Metadata
 - Moving Metadata

- Expected knowledge
 - SAS Platform Administration: Fast Track training course, or
 - Equivalent experience

SAS Certified Data Integration Developer for SAS 9

- 78 multiple-choice questions (70% to pass)

- Exam topics include
 - Creating Metadata for Source and Target Data
 - Creating Metadata for Target Data and Jobs
 - Working with Transformations
 - Working with Tables and the Table Loader Transformation
 - Working with Slowly Changing Dimensions
 - Defining Generated Transformations
 - Deploying Jobs

- Expected knowledge
 - SAS Data Integration Studio: Fast Track training course, or
 - Equivalent experience



SAS Certified BI Content Developer for SAS 9

- 64 multiple-choice questions (67% to pass)
- Exam topics include
 - Business User Reporting Applications
 - Advanced Reporting Techniques and Roles
 - Creating Information Maps
 - Building a SAS BI Dashboard Application
 - Building Stored Processes
 - Utilizing Advanced Techniques with SAS Reports
 - Utilizing Multidimensional (OLAP) Data Sources
 - The Environment Metadata
- Expected knowledge
 - Business Intelligence: Fast Track training course, or
 - Equivalent experience

Run by
Prometric
www.prometric.com

SAS Certified Predictive Modeller using SAS Enterprise Miner

- 61 multiple-choice questions (70% to pass)
- Uses Enterprise Miner

- Exam topics include
 - Data Preparation
 - Predictive Models
 - Model Assessment
 - Scoring and Implementation

- Expected knowledge
 - Applied Analytics using Enterprise Miner training course, or
 - Equivalent experience

**Run at
SAS Offices**

Darrell Jones
Darrell.jones@sas.com



SAS Certified Data Integration Implementation Specialist (new!)

- How to design & build a DI project

- Workshop includes:
 - SAS/Data Integration Web Services
 - SAS/Data Integration Messaging Queues
 - SAS In-Database Processing
 - DataFlux
 - LSF

**Run at
SAS Offices**

Darrell Jones
Darrell.jones@sas.com

SAS Certified Platform Migration Specialist (relaunched!)



- Workshop includes:
 - Migration Overview
 - Migration Considerations
 - 9.1 to 9.3
 - 9.2 to 9.3
 - 9.3 to 9.3
 - Partial Promotion
 - SMU Packaging

- ***N.B: Tech Support reducing for 9.1 effective end of 2011.***

**Run at
SAS Offices**

Darrell Jones
Darrell.jones@sas.com

Retired Certifications

- SAS Certified Developer V6
- SAS Certified Developer V8
- SAS Certified Professional - Application Development V6
- SAS Certified Professional - Application Development V6
- SAS Certified Professional - Business Intelligence V6
- SAS Certified Professional - Data Management V6
- SAS Certified Professional - Data Management V6
- SAS Certified Professional V6
- SAS Certified Professional V8

Training/Certification Bundles

<http://www.sas.com/offices/asiapacific/sp/training/discounts/bundles/>

To prepare for a [Base Programming credential](#):

Base SAS Programming Certification Packages

BEST VALUE!

Save 40%

Classroom + e-Learning + Certification

Classroom training:

SAS Programming 1	\$2,700
SAS Programming 2	\$2,700

e-Learning: (practice after class)

SAS Programming 1 e-Course	\$840
SAS Programming 2 e-Course	\$1,000

Certification:

e-Practice exam	\$60
Certification exam voucher	\$190

Full retail price: ~~-\$7,490~~

Save 40% **\$4,494**

OR

Base Certification Package

Save 10%

e-Learning + Certification

Classroom training:

Not Included

e-Learning:

SAS Programming 1 e-Course	\$840
SAS Programming 2 e-Course	\$1,000

Certification:

e-Practice exam	\$60
Certification exam voucher	\$190

Full retail price: ~~-\$2,090~~

Save 10% **\$1,881**

>> Buy Now

>> Buy Now

Training/Certification Bundles

<http://www.sas.com/offices/asiapacific/sp/training/discounts/bundles/>

Base SAS Programming "Finish Up" Certification Packages

BEST VALUE! Save 40%

Classroom + e-Learning + Certification

Classroom training:
[SAS Programming 2](#) \$2,700

e-Learning: (practice after class)
[SAS Programming 2 e-Course](#) \$1,000

Certification:
[e-Practice exam](#) \$60
Certification exam voucher \$190

Full retail price: ~~-\$3,950~~

Save 40% \$2,370

OR

Save 10%

e-Learning + Certification

Classroom training:
Not Included

e-Learning:
[SAS Programming 2 e-Course](#) \$1,000

Certification:
[e-Practice exam](#) \$60
Certification exam voucher \$190

Full retail price: ~~-\$1,250~~

Save 10% \$1,125

» Buy Now

» Buy Now

Training/Certification Bundles

<http://www.sas.com/offices/asiapacific/sp/training/discounts/bundles/>

To prepare for an [Advanced Programming credential](#):

Advanced SAS Programming Certification Packages

<div style="background-color: #0056b3; color: white; padding: 2px; display: inline-block; font-weight: bold;">BEST VALUE!</div> Save 40%	OR	Save 10%																										
<p>Classroom + e-Learning + Certification</p> <p>Classroom training:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>SAS Programming 3</td><td style="text-align: right;">\$3,000</td></tr> <tr><td>SAS Macro Language 1</td><td style="text-align: right;">\$2,000</td></tr> <tr><td>SAS SQL 1</td><td style="text-align: right;">\$2,000</td></tr> </table> <p>e-Learning:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>SAS Programming 3 e-Course</td><td style="text-align: right;">\$1,000</td></tr> <tr><td>SAS Macro Language 1 e-Course</td><td style="text-align: right;">\$670</td></tr> <tr><td>SAS SQL 1 e-Course</td><td style="text-align: right;">\$670</td></tr> </table> <p>Certification:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>e-Practice exam</td><td style="text-align: right;">\$60</td></tr> <tr><td>Certification exam voucher</td><td style="text-align: right;">\$190</td></tr> </table> <hr/> <p>Full retail price: -\$9,590</p> <p>Save 40% \$5,754</p>	SAS Programming 3	\$3,000	SAS Macro Language 1	\$2,000	SAS SQL 1	\$2,000	SAS Programming 3 e-Course	\$1,000	SAS Macro Language 1 e-Course	\$670	SAS SQL 1 e-Course	\$670	e-Practice exam	\$60	Certification exam voucher	\$190	OR	<p>e-Learning + Certification</p> <p>Classroom training: Not Included</p> <p>e-Learning:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>SAS Programming 3 e-Course</td><td style="text-align: right;">\$1,000</td></tr> <tr><td>SAS Macro Language 1 e-Course</td><td style="text-align: right;">\$670</td></tr> <tr><td>SAS SQL 1 e-Course</td><td style="text-align: right;">\$670</td></tr> </table> <p>Certification:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>e-Practice exam</td><td style="text-align: right;">\$60</td></tr> <tr><td>Certification exam voucher</td><td style="text-align: right;">\$190</td></tr> </table> <hr/> <p>Full retail price: -\$2,590</p> <p>Save 10% \$2,331</p>	SAS Programming 3 e-Course	\$1,000	SAS Macro Language 1 e-Course	\$670	SAS SQL 1 e-Course	\$670	e-Practice exam	\$60	Certification exam voucher	\$190
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Certification exam voucher	\$190																											

» Buy Now

» Buy Now

Training/Certification Bundles

<http://www.sas.com/offices/asiapacific/sp/training/discounts/bundles/>

**SAS® Enterprise Guide®
Introductory Package**

BEST VALUE!

Save 40%

Classroom + e-Learning

Classroom training:

SAS Enterprise Guide 1	\$1,800
SAS Enterprise Guide 2	\$2,000

e-Learning:

SAS Enterprise Guide 1 e-Course (practice after class)	\$500
New Features in SAS Enterprise Guide 4.3 e-Lectures	\$100

Full retail price:	-\$4,460
Save 40%	\$2,676

» Buy Now

Training/Certification Bundles

<http://www.sas.com/offices/asiapacific/sp/training/discounts/bundles/>

SAS Visual Data Discovery Best Value Package

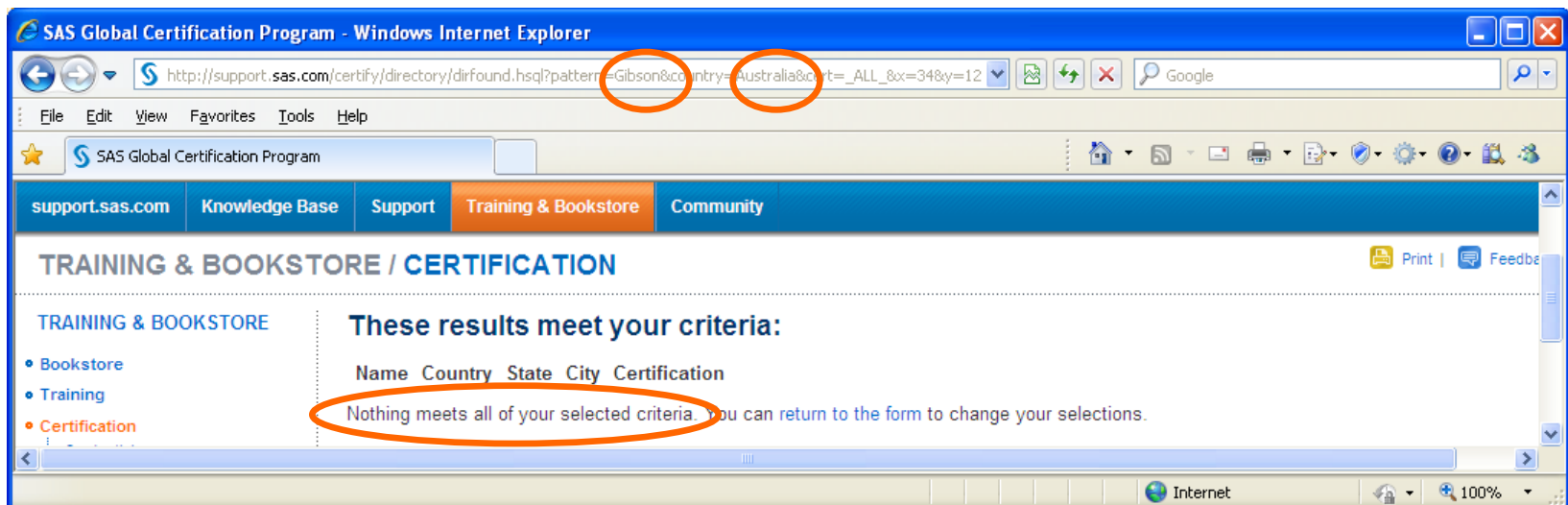
BEST VALUE! Save 40%	OR	Save 10%
Classroom + e-Learning		e-Learning
Classroom training: SAS Enterprise Guide 1 \$1,800 JMP Software: Data Exploration \$900		Classroom training: Not Included
e-Learning: (practice after class) SAS Enterprise Guide 1 e-Course \$560 JMP Software: Data Exploration e- course \$280		e-Learning: SAS Enterprise Guide 1 e-Course \$560 JMP Software: Data Exploration e- course \$280
Full retail price: -\$3,540		Full retail price: -\$840
Save 40% \$2,124		Save 10% \$756
» Buy Now		» Buy Now

Certification Misconceptions

- Certification is an introduction to SAS
 - *"I'm new to SAS. I want a SAS job. How do I get certified?"*
 - Certification is **not** an introduction
 - It is a validation of what you must already know

- Certification bypasses training and/or experience
 - Training not required, but recommended

- Certification guarantees me a job
 - *"Will SAS Certification get me a job?"*
 - Another channel, complementing & complemented by your training and/or experience



My Misconception

- What I wanted Certification to mean...



My Misconception

- The reality...



Wrapping up..

- Some thoughts for Certification.. (*i.e, my “Wish List”*)
 - Certification benefits
 - Discounted Professional Indemnity fees
 - Discounted training and/or event costs

 - “Tiered” expertise recognition
 - Analogous to university degrees – Bachelor’s thru to PhD
 - How measured - Peer review, Papers submitted?

- Certification should add value to:
 - SAS
 - Employer
 - Me
 - You

Links

■ SAS Certification

- support.sas.com/certify

■ SAS Australia / New Zealand

- ANZ Partners & consultants accreditation
 - <http://www.sas.com/offices/asiapacific/sp/partners/accreditation.html>
- List of Certified ANZ Partners & consultants
 - <http://www.sas.com/offices/asiapacific/sp/partners/certified.html>
- Darrell Jones
 - darrell.jones@sas.com

Links

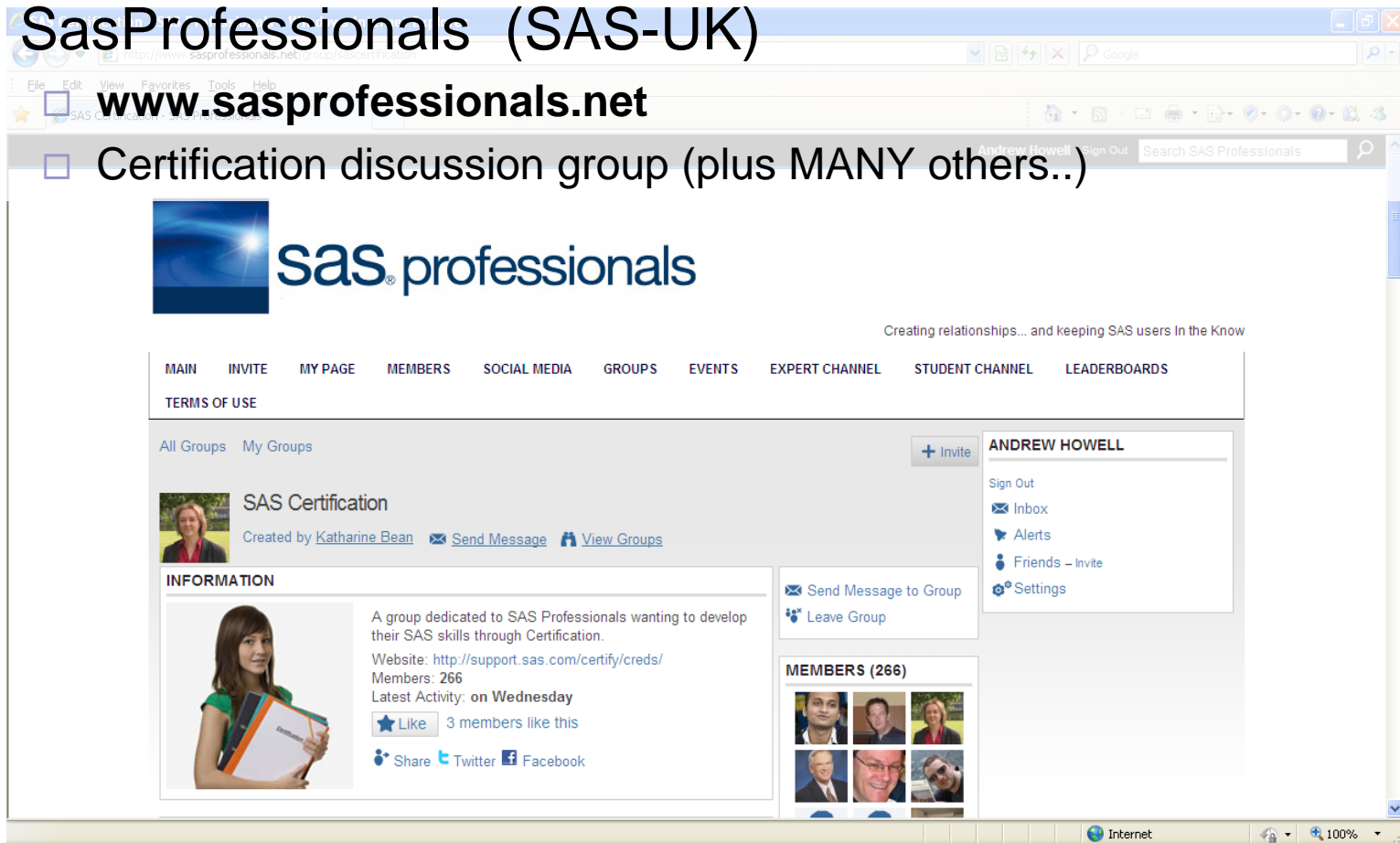
- LinkedIn

- SAS Certification Professionals group

- SasProfessionals (SAS-UK)

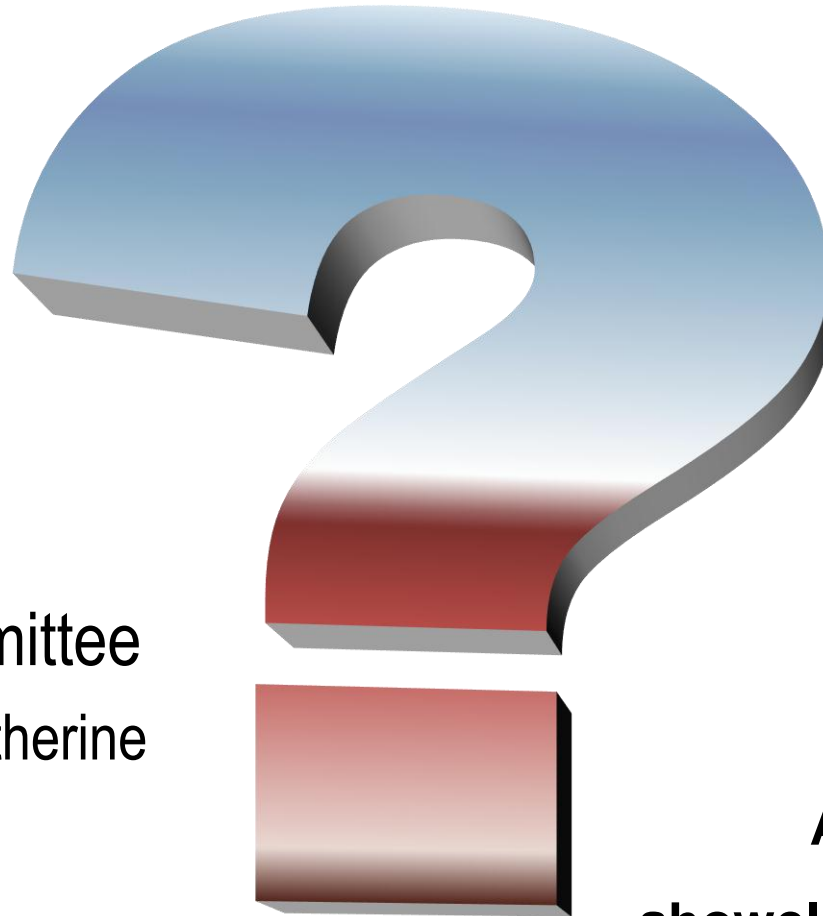
www.sasprofessionals.net

- Certification discussion group (plus MANY others..)



The screenshot shows the website for SasProfessionals. At the top, there is a navigation menu with links for MAIN, INVITE, MY PAGE, MEMBERS, SOCIAL MEDIA, GROUPS, EVENTS, EXPERT CHANNEL, STUDENT CHANNEL, and LEADERBOARDS. Below the navigation, there is a section for "SAS Certification" with a profile picture of Katharine Bean and a description: "A group dedicated to SAS Professionals wanting to develop their SAS skills through Certification." The website URL is <http://support.sas.com/certify/creds/>, and there are 266 members. The latest activity is from Wednesday. There are 3 members who like this group. Social sharing options for Twitter and Facebook are also visible. On the right side, there is a user profile for Andrew Howell with options for Sign Out, Inbox, Alerts, Friends - Invite, and Settings. The bottom of the page shows the Internet Explorer browser interface with a 100% zoom level.

Questions



Many thanks

- SNUG Committee
 - Scott & Catherine
- SAS
 - Darrell Jones
 - Bill Gibson

Andrew Howell
ANJ Group Pty Ltd

ahowell@anjgroup.net.au

<http://au.linkedin.com/in/howellandrew>

<http://www.sasprofessionals.net/profile/AndrewHowell>

<http://www.sascommunity.org/wiki/User:AndrewHowell>