

CSAO

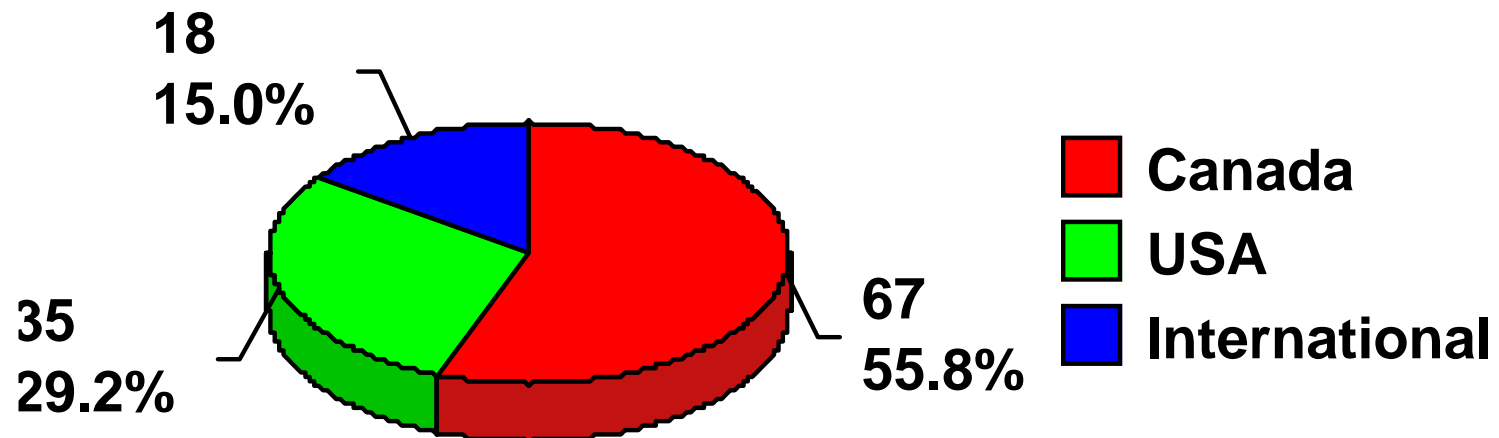
Examination Results - 2004



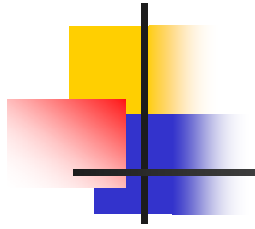
Analysis of Performance

Candidates By Country – 2004

(New Candidates n=120)



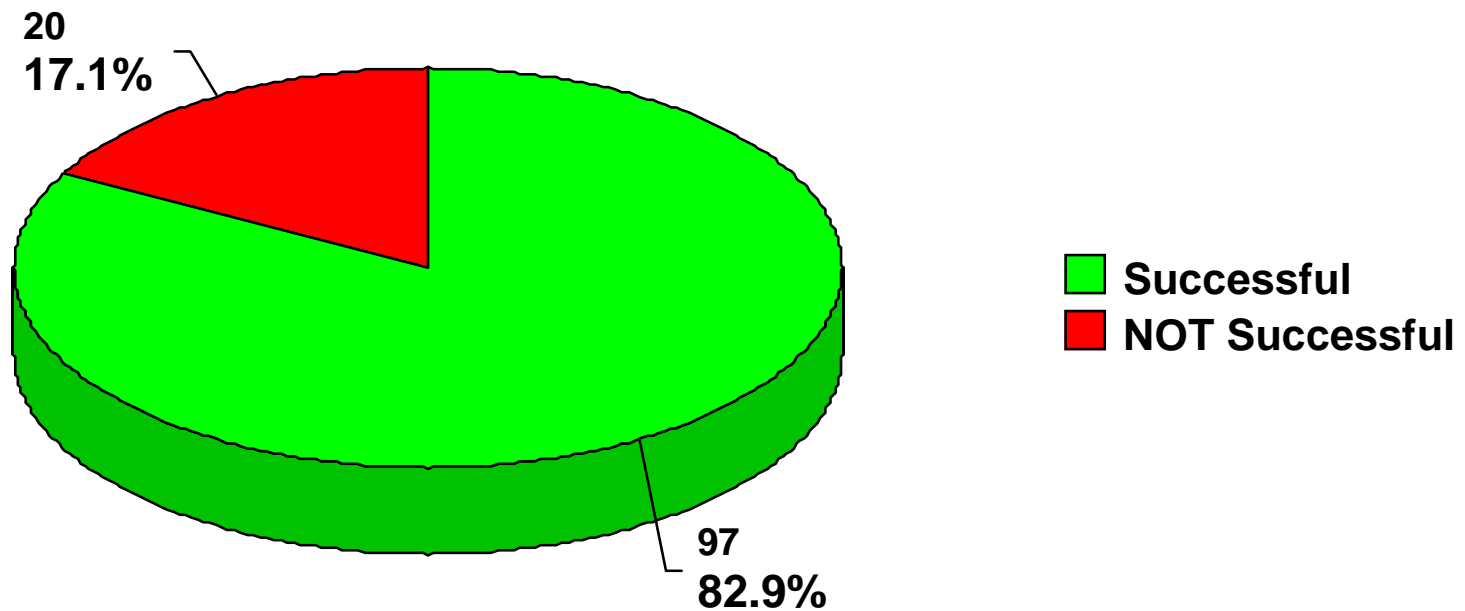
CSAO 2004 Administration Institutions Represented



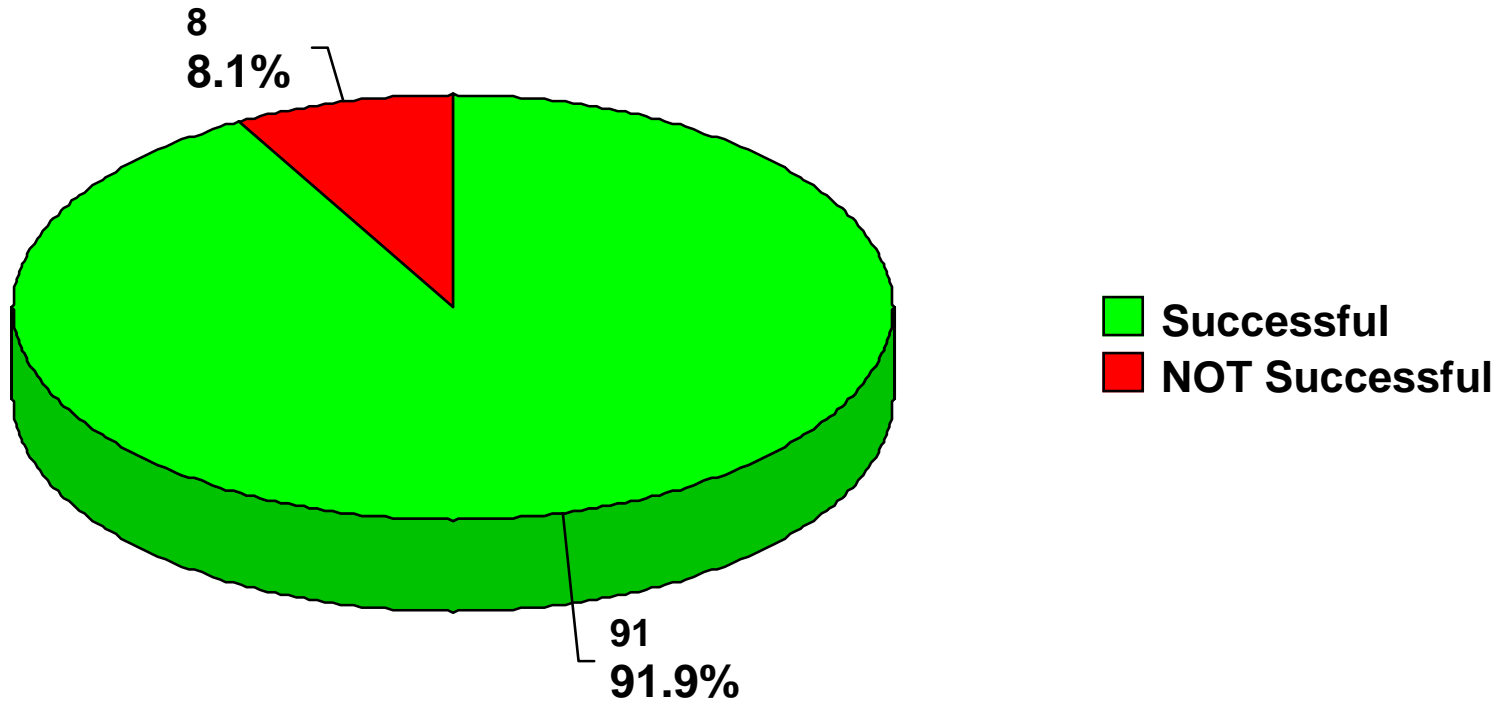
■ Waterloo	61	■ Puerto Rico	5
■ Montreal	6	■ U of Benin-Nigeria	3
■ Pacific U.	10	■ Cairo U.	3
■ Illinois	9	■ Iran	2
■ New England	6	■ Bradford England	1
■ SUNY	5	■ La Salle U.	1
■ Nova S. Eastern	2	■ Elite (India)	1
■ Michigan College	1	■ U. of Manchester	1
■ Pennsylvania	1	■ Bogota Columbia	1
■ Southern Cal.	1		

Percentage of ALL New Candidates Successfully Completing ALL Components

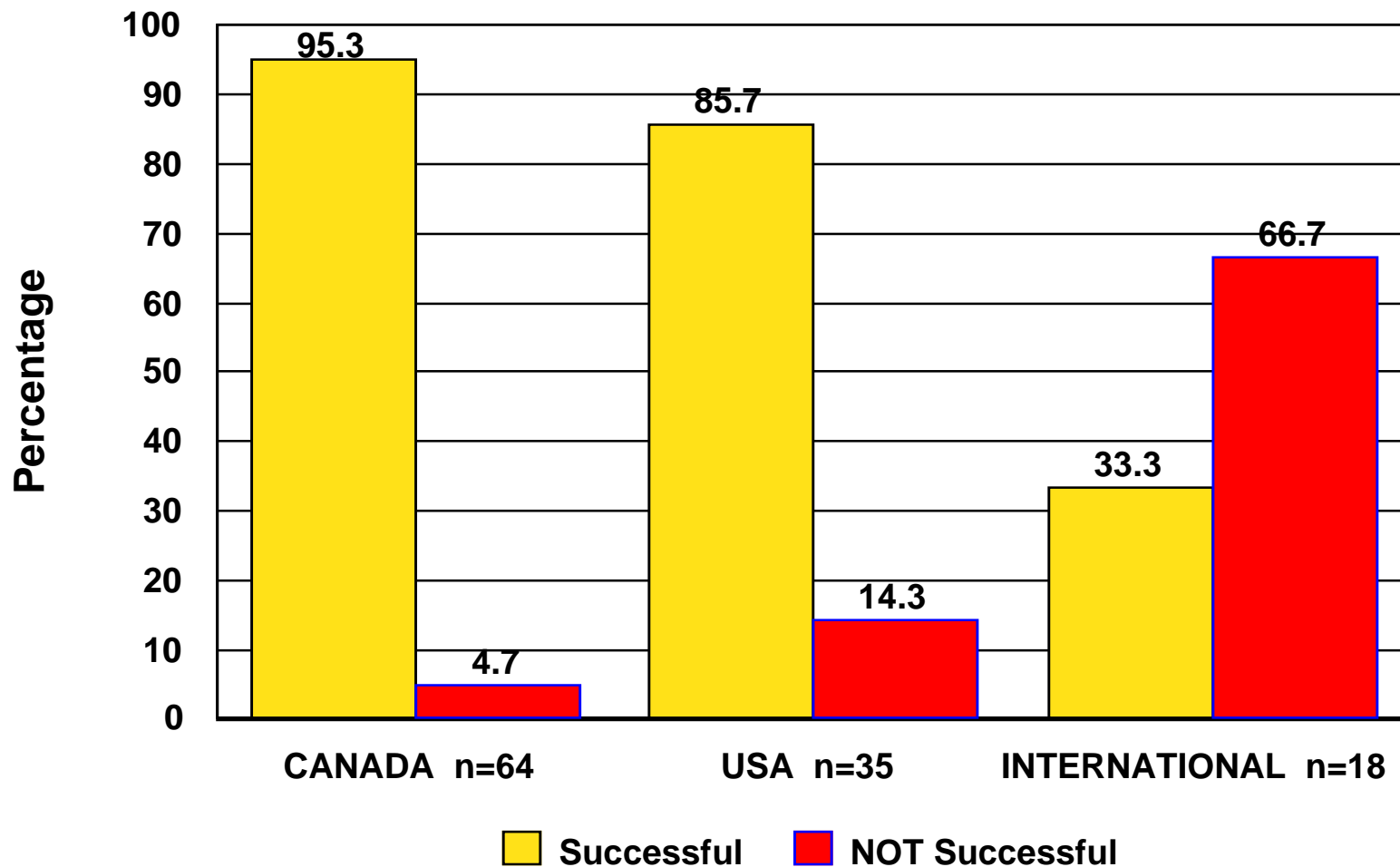
(117/120 Completed All 8 components & 3/120 Completed OT Only)



Percentage of NORTH AMERICAN ONLY Candidates Successfully Completing ALL Components



Percentage by Group Successfully Completing CSAO For 2004





Key to Abbreviations

Written Components

- **BS= Biological Sciences**
- **VS= Visual Sciences**
- **OT= Ocular Therapeutics**
- **CJ= Clinical Judgment**

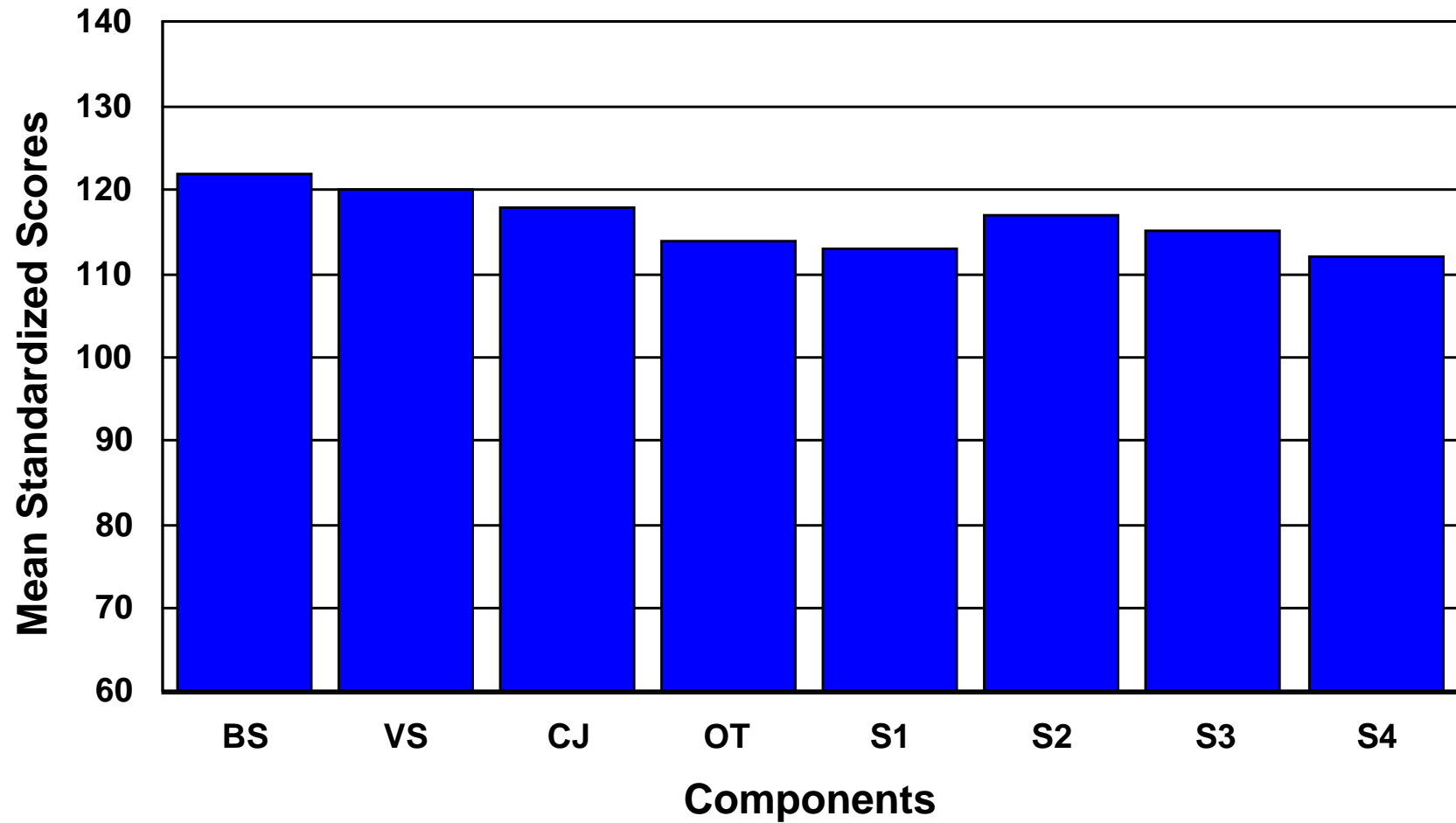


Key to Abbreviations

Skills Components

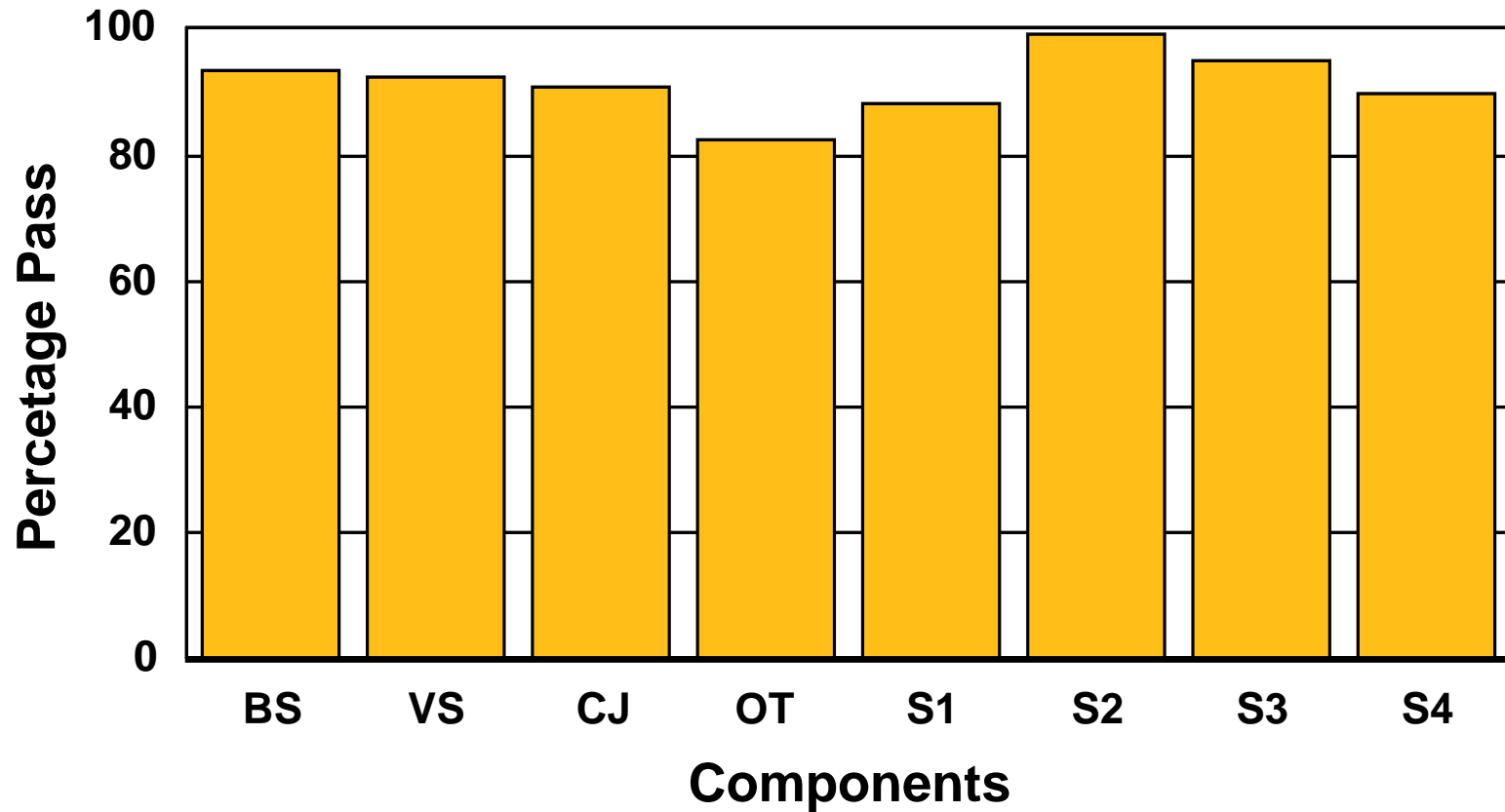
- **S1 = Interviewing & Assessing Refractive & Accommodative Conditions**
- **S2 = Assessing Ocular & Sensory Integrative Functions**
- **S3 = Assessing Ocular & Systemic Disease**
- **S4 = Assessing Ophthalmic Appliances**

Performance By Component For All 117 New Candidates - 2004



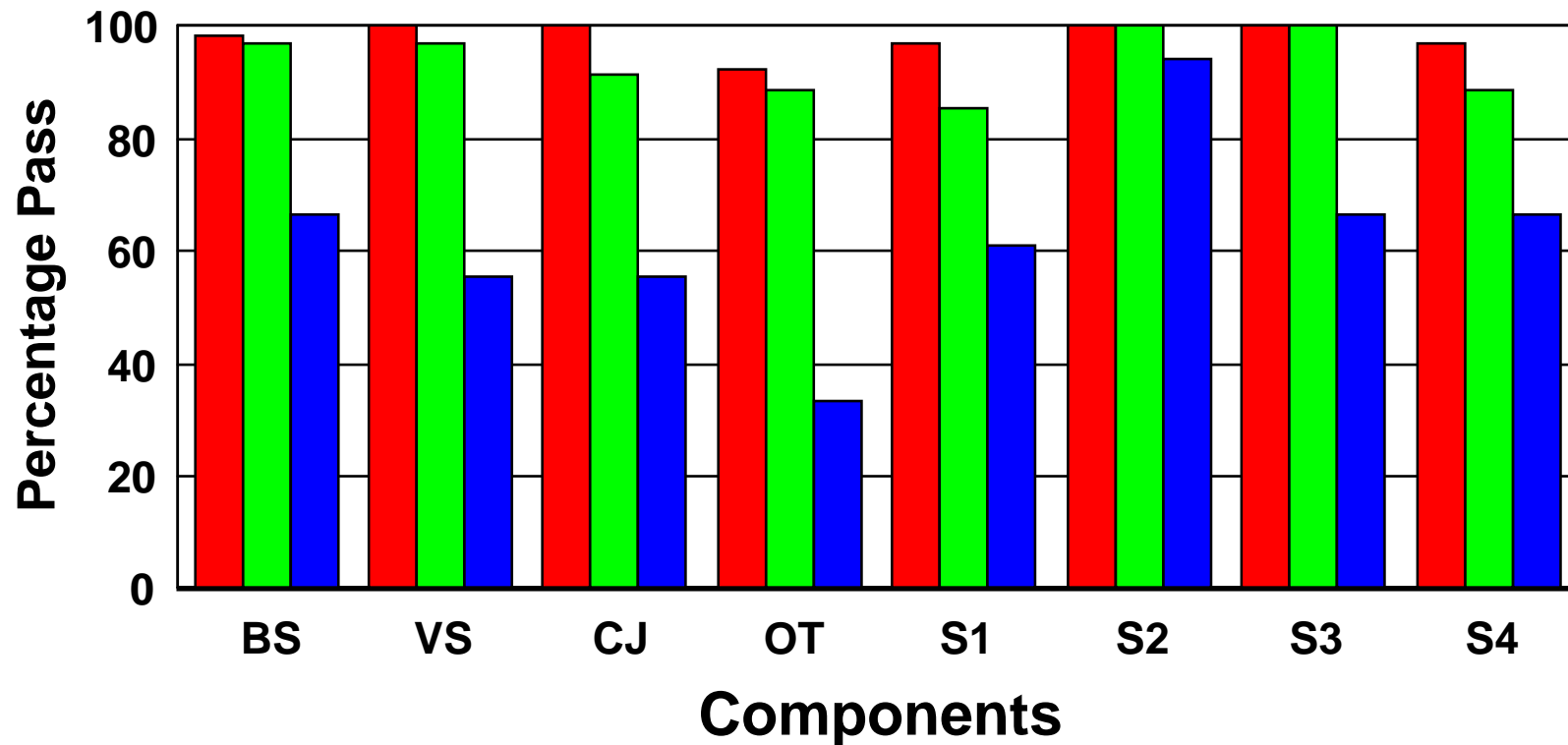
Pass Rate By Component

For All 117 New Candidates - 2004



Pass Rates by Component

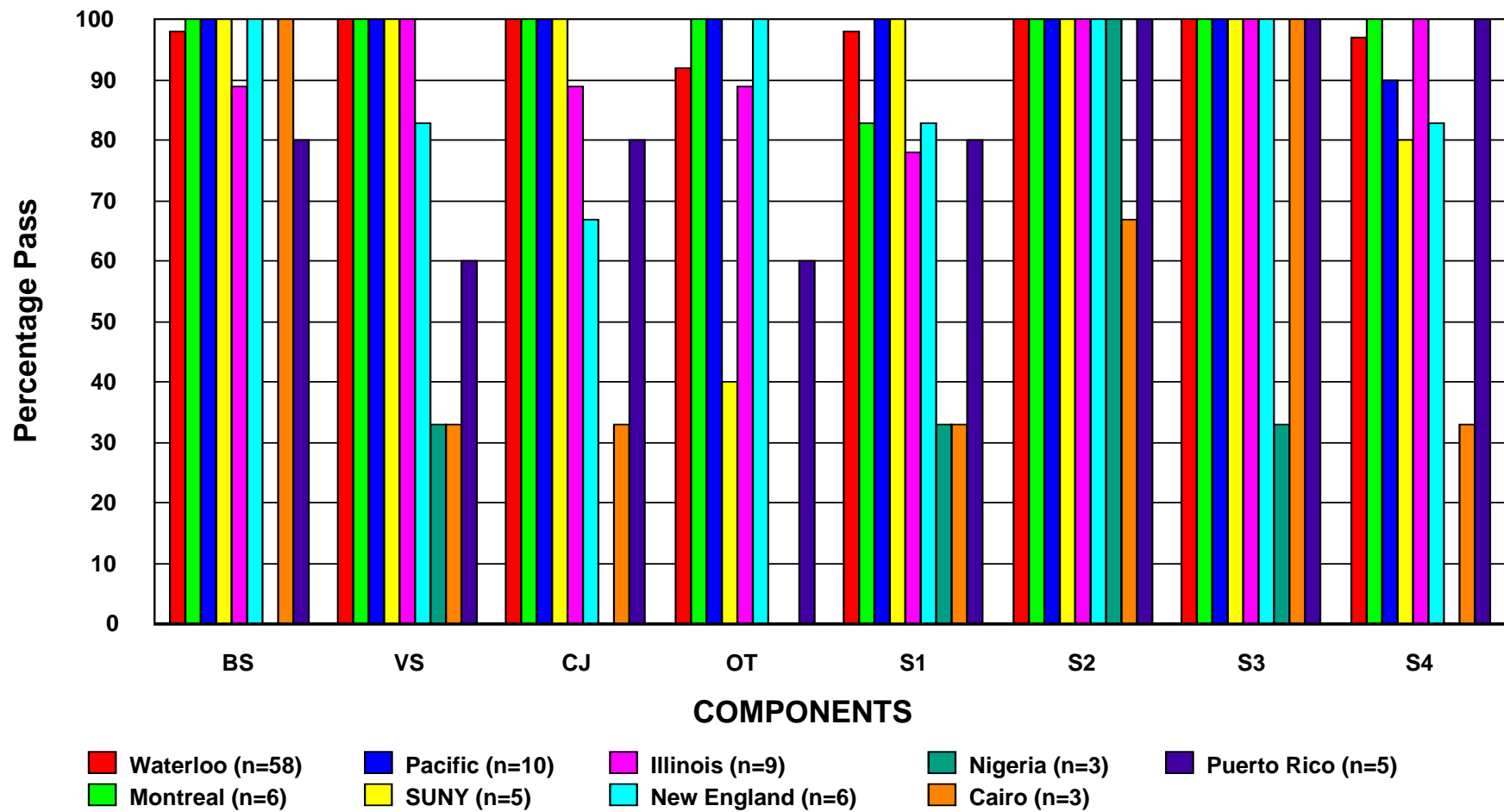
Canada, USA, International



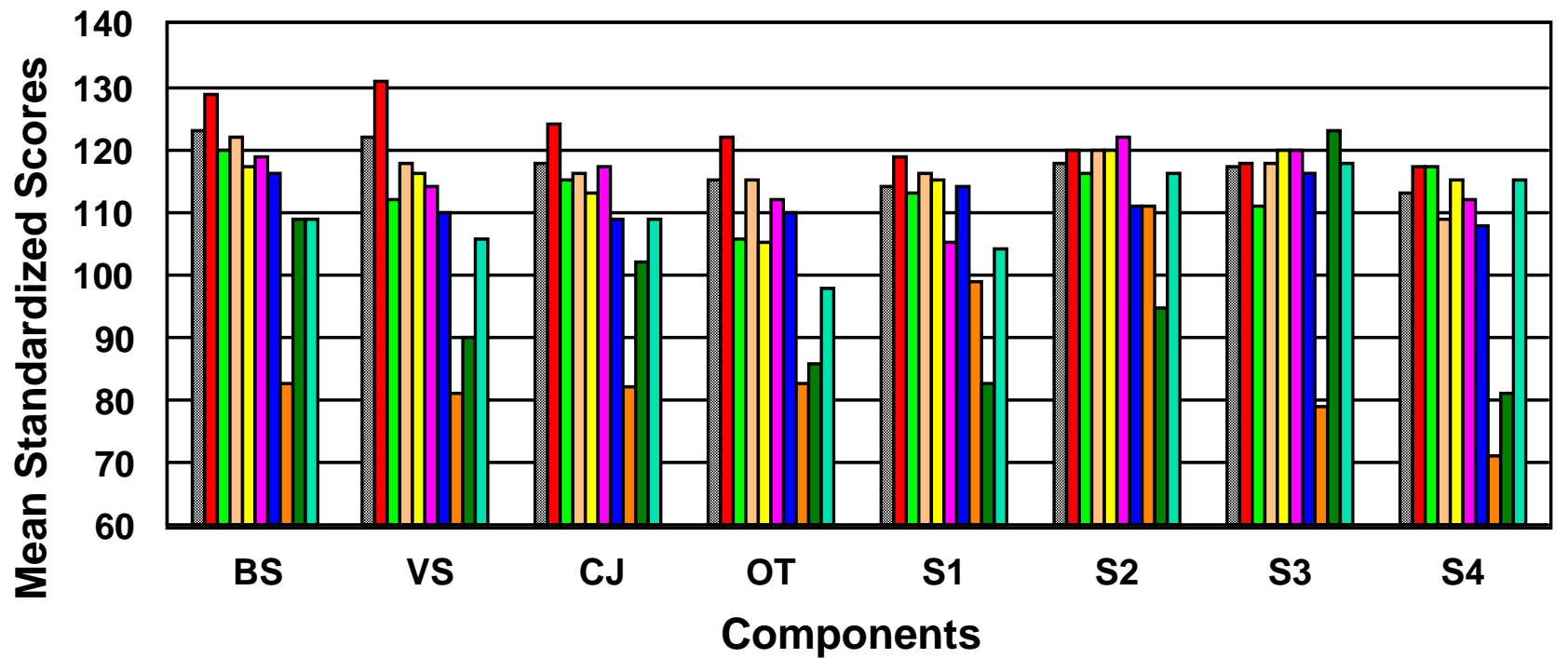
■ Canada (n=64) ■ USA (n=35) ■ International (n=18)

Passing Rate For Each CSAO Component - 2004

For Schools Sending 3 or More NEW Candidates



Comparison of 9 Institutions to Population Mean For All CSAO Components - 2004



- Population Mean
- Waterloo (n=58)
- Montreal (n=6)
- Pacific (n=10)
- SUNY (n=5)
- Illinois (n=9)
- New England (n=6)
- Nigerial (n=3)
- Cairo (n=3)
- Puerto Rico (n=5)

Written Components - 2004

Comparison By Institution To Population Mean (PM)

If College not mentioned, NO significant difference from (PM)

- **Biological Sciences:** Waterloo significantly higher than PM;
New England and Nigeria are significantly lower than PM
- **Visual Sciences:** Waterloo significantly higher than PM;
Montreal, Illinois, New England, Nigeria, Cairo, Puerto Rico,
significantly lower than PM
- **Clinical Judgment:** Waterloo significantly higher than PM;
Nigeria significantly lower than PM
- **Ocular Therapeutics:** Waterloo significantly higher than PM;
Montreal, New England, Nigeria, Cairo,
significantly lower than PM

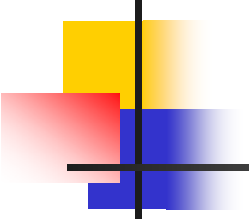
Skills Components -2004

Comparison By Institution To Population Mean (PM)

If College not mentioned, NO significant difference from (PM)

- **Session 1:** Waterloo significantly higher than PM
Illinois, Nigeria, Puerto Rico, significantly lower than PM
- **Session 2 :** Waterloo & Illinois significantly higher than PM
New England, significantly lower than PM
- **Session 3 :** None of the institutions differed significantly from the PM
- **Session 4 :** Waterloo significantly higher than PM
Nigeria significantly lower than PM

Reliability Coefficients For CSAO Components 2004



Components	Standardized Cronbach's alpha
BS	.92
VS	.92
CJ	.78
OT	.78
S1	.71
S2	.70
S3	.72
S4	.70