

NORTH CAROLINA REAL ESTATE EDUCATORS CONFERENCE

EXAM UPDATE

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Topics for Discussion

- National Job Analysis Study update
- Examination development processes
- Examination performance

→ Please ask questions as they arise

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Job Analysis

- Purpose: define practice, create exam specifications
- Conducted by Advisory Board
- Survey of licensees every 5 years
- Next study:
 - Begin in 2014 (instructor input welcome)
 - Analyze in 2015
 - Launch forms in 2016

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1,167 Respondents by Region (2010)

Northeast - CT, MA, ME, NH, NJ, NY, PA, RI, VT
Midwest - IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI
South - AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV
West - AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY

Region	Percentage
Midwest	43.3%
South	32.0%
West	15.3%
Northeast	8.7%
No Response	0.8%

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Property Types Dealt With (select all that apply)

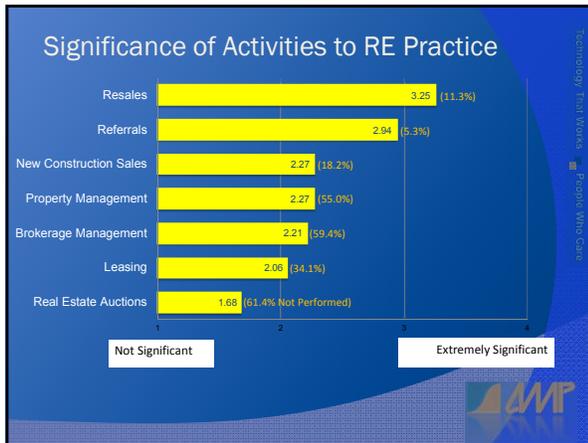
Property Type	Percentage
Single family	89.7%
Multi-family	53.3%
Office	27.8%
Agricultural	25.2%
Retail	23.1%
Industrial	16.0%
Resort/Recreational	15.8%

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Area of Most RE Practice

Area	Percentage
Suburban	36.8%
Urban	22.5%
Rural	18.5%
Substantial activity in all areas	21.9%
No Response	0.3%

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Decision Rules

- Part of practice for clear majority of licensees
- Clearly more than 'somewhat significant'
- Checked by: Region of US, entry level practitioners, individual states

perform tasks related to the topic, how significant is this topic your current real estate practice?

- Not part of practice
- Not significant
- Somewhat significant
- Quite significant
- Extremely significant

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A National Job Analysis of Real Estate Licensees Executive Summary - August 2010

The purpose of this study was to identify the responsibilities of real estate professionals as a first step in the continuing development of job-related licensing examinations. An Advisory Board (AB) of representatives from the states that use real estate examinations provided by Applied Measurement Professionals, Inc. (AMP) conducted a study to provide the support necessary to develop specifications upon which content-valid multi-state licensing examinations could be built.

The study involved developing a web-based job analysis survey, inviting real estate professionals to participate in the survey, analyzing the responses, and developing examination specifications based on the survey responses.

The AB met on September 29, 2009 to initiate the following five tasks:

1. Identifying topics for the survey instrument.
2. Determining the rating scales.
3. Developing a sampling plan.
4. Determining the relevant demographic variables of interest.
5. Integrating demographics, rating scales, and topics into a survey instrument.

The survey developed for this study was based on an analysis of the ARELLO Model Curriculum, content outlines from other real estate examination providers (including the previous AMP outline), and input from focus group meetings of real estate practitioners, educators, and

Questions?

Links in the chain of evidence...

- Job Analysis
- Test Specifications
- Item Writing
- Examination Development
- Standard Setting (equating)
- Examination Administration
- Scoring

Examination Development Steps

- New items written by SMEs
- Entered in bank, edited by AMP staff
- Reviewed and approved by SMEs
- Reviewed/approved by representatives from 13 jurisdictions
- Pretested in 13 jurisdictions
- Review of item analysis (and comments)
- Available for use on a scored form

Item Banking system – over 1000 national items

Item Analysis for previous item

- p value is .74 (i.e., overall, 74% correct)
- aggregate + 5 most recent forms shown
- r_{pb} (discrimination: high scorers answer correctly)

Admins	p	rpb	Avg	A	%	Avg	B	%	Avg	C	%	Avg	D	%	Avg
5433	0.74	0.52	74.89	4015	73.90	78.43	821	15.11	64.58	340	6.26	63.51	251	4.62	67.85
232	0.65	0.56	71.49	151	65.09	76.55	49	21.12	61.08	14	6.03	59.18	18	7.76	66.94
188	0.55	0.42	70.31	104	55.32	74.97	48	25.53	64.38	23	12.23	63.94	12	6.38	67.50
188	0.64	0.54	69.99	120	63.83	74.83	38	20.21	60.09	16	8.51	64.06	14	7.45	62.09
226	0.60	0.58	71.55	135	59.73	77.50	54	23.89	61.57	21	9.29	63.91	16	7.08	65.09
353	0.76	0.48	74.58	267	75.64	77.59	56	15.86	66.21	15	4.25	59.33	14	3.97	69.39

Ensuring comparability of forms (pre-equating)

BASE FORM 40				EQUATED FORM 47			
TEST MEAN	76.980	Reliability	0.910	TEST MEAN	76.970	Reliability	0.911
TEST STDEV	12.939	DC	0.913	TEST STDEV	12.919	DC	0.913
SEM	3.871			SEM	3.847		
Number of Items	100			Number of Items	100		
Enter Cut-score	75	16.513		Equated Cut-score	74.993	16.320	

Item	Obj	Seq	P-value	Discrim	Item var	STDEV	IRI
1	1A	5	0.73	0.38	0.197	0.444	0.169
2	1A	36	0.86	0.26	0.120	0.347	0.090
3	1A	38	0.79	0.38	0.166	0.407	0.155
4	1A	70	0.64	0.41	0.230	0.480	0.197
5	1A	85	0.77	0.43	0.177	0.421	0.181
6	1A	105	0.84	0.28	0.066	0.257	0.066
7	1B	117	0.66	0.43	0.224	0.474	0.204
8	1B	135	0.68	0.29	0.218	0.466	0.135
9	1B	9	0.9	0.45	0.090	0.300	0.135
10	1B	18	0.64	0.24	0.230	0.480	0.115
11	1B	15	0.81	0.34	0.154	0.392	0.133

Questions?

Exam Performance

13 States

NC

AL GA IL

MO MT ND

NE NH SD

VT WA WY

State	N	Mean	S.D.
NC	2,874	79.25	9.39
	4,047	72.87	12.44
	2,629	76.49	10.58
	2,491	75.39	12.74
	1,915	72.49	13.01
	998	67.14	14.01
	667	68.19	14.32
	370	72.59	12.44
	306	73.62	11.91
	296	70.36	11.88
	212	72.10	12.23
	188	71.57	11.04
	154	71.89	12.16

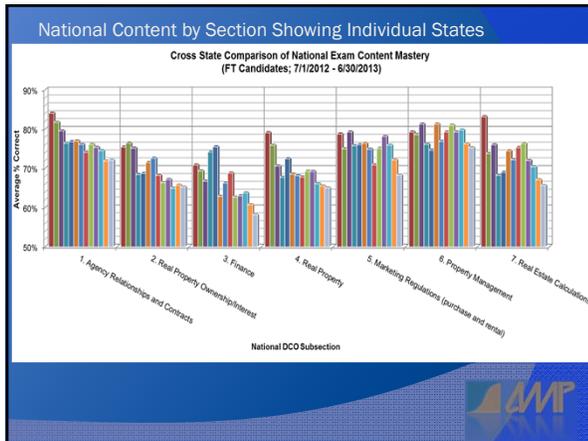
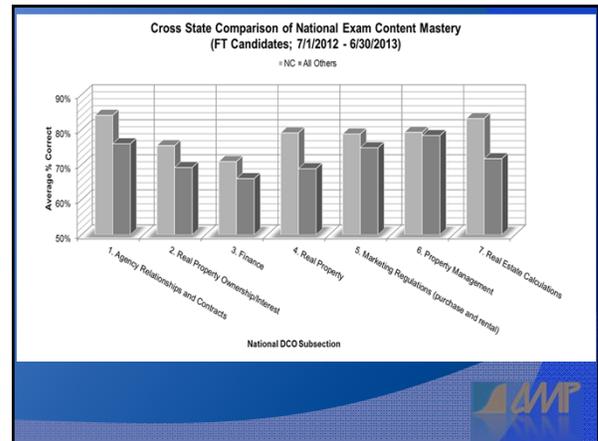
Total National Exam Scores

7/1/12 to 6/30/13

Mean National Score Change

Early 2012 compared to '12-'13

- North Carolina: 1.98 point decline
- Other states: 0.66 point decline
- FT Candidate volume up nationally
- Reintroduction of a form

Other Updates

AMP's relationship with publishers
 Oversampling (or under sampling) content
 Update of practice tests
 - sample exam vs. self assessment
 Terminology?



Other AMP Updates

- Check the web...



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