Additional System Report for Rutgers Interactive Track

1. Rich Format Data

	RUINQ-G Mean (SD)	RUINQ-R Mean (SD)	Total Mean (SD)
Cycles	7.19 (5.30)	6.41 (3.77)	6.79 (4.59)
Instances saved	5.49 (3.74)	4.56 (3.45)	5.02 (3.61)
Terms in the first query	3.52 (3.41)	3.69 (2.98)	3.60 (3.19)
Terms entered by user in the last query	4.02 (4.22)	4.62 (4.16)	4.32 (4.18)
Positive feedback terms selected	2.31 (3.34)	1.76	2.08
Negative feedback terms selected		1.97	1.97
Full documents displayed	27.24 (16.30)	24.80 (12.15)	26.01 (14.35)
Titles shown	304.02 (339.69)	203.33 (250.65)	253.28 (301.24)

2. Transcript for Topic 365i (Searcher 011)

What follows is searcher 011's log of system interaction for topic 365i. Given are the elapsed time, a description of the searcher's actions, system responses, and extracts from the searcher's verbal protocol (enclosed in quotation marks). The document titled followed by its first two sentences of full text is shown (enclosed in curly brackets) for each document that the searcher selected to view.

00:00 USER: Start search; reads topic description.
"Oh. What effects have been attributed to El Nino. This is interesting. Cool. I can use this one. Okay. All right. This is kind of a fun one. Ok, I'm putting this on. I should take a look at the clock. See where I am here. See how easy this is to do. See where the clock is. Okay. El Nino, I'm going to put that in."

00:49 SYS: Submitted query: "El Nino" weather effect
0 positive marked documents, 0 positive feedback terms
0 negative marked documents, 0 negative feedback terms
Result of query evaluation: 150 documents retrieved
Summary display

00:55 USER: "Ah, what effects. El Nino. Hmmm. I'm going to put in the term weathers effects or weather effect. Okay. This is interesting. I'm just thinking about this 91 through 94, it doesn't have the last year which has been El Nino in our experience."

01:08 USER: Display full text of document ranked 1: FT921-10204
{FT 07 FEB 92 / Commodities and Agriculture: Keeping a weather-eye on a troublesome 'child' / A look at the crop problems posed by the unpredictable El Nino climate phenomenon. TO CALM anxious grain traders the Chicago Board of Trade will offer a seminar later this month

on El Nino, the weather phenomenon that develops in the equatorial Pacific every three to five years and can cause global climate upsets. Grain traders are keen to know if they can expect this year's El Nino to disturb the US weather pattern sufficiently to make a dent in crop output.}
"Commodity, eye on a troublesome child, document of each type, weather phenomenon, weather pattern, drought. This is a nice article. I'm going to take this one."

01:22 USER: Mark as Save document ranked 1 (FT921-10204)
Scroll to line 62 of document ranked 1 (FT921-10204)
"Let's see how I look at this. This is February of '92. Let me cancel this a second. What little keyword can I call it."
Unmark as Save document ranked 1 (FT921-10204)
"Keeping an eye on a troublesome child. Commodities and agriculture. Crop problems. This is nice. Temperatures. Agriculture. Crop cast. Weather forecast and service for crops. Ah, the phenomena has prompted commodities markets to gyrate in the past. El Nino destroyed Peruvian fishmeal catch but then accounted for some 45 per cent of the world trade in protein feed. In 82 83 it caused a drought in Africa, which helped to send cocoa prices up by nearly 70 per cent over a period of a year.
This is good. I'm going to use it. I'm going to call it crop losses. I'm going to call it crop effects. Okay. This is good."
Mark as Save document ranked 1 (FT921-10204)
Enter instance: crop effects

02:37 USER: "Commodities pull drought pulls the plug on much of Colombia."
Display full text of document ranked 3: FT922-14235
{FT 07 APR 92 / Drought pulls the plug on much of Colombia. POWER cuts of at least eight hours a day have been imposed all over Colombia in an effort to cope with a drought that has reduced the water for hydro electric plants. There is little prospect of rain, and reservoirs are drying into baked mud.}
"Heavy deforestation. This is not crops."
Scroll to line 10 of document ranked 3 (FT922-14235)
"Electricity been running. Normal weather patterns. Heavy debts. No."

03:01 USER: "Okay. This is crops."
Display full text of document ranked 4: FT922-12623
{FT 16 APR 92 / Commodities and Agriculture: Supply fears buoy sugar prices. FEARS OF a tighter sugar supply/demand balance in 1992-93 are supporting the world market, according to reports from two London trade houses. Raw sugar prices have recently touched eight-month highs, nudging 10 cents a lb in the New York market, on fears of tight nearby supplies following damage to the South African crop because of drought.}
"This is again commodities and agriculture." El Nino weather effects. Going for the jugular."

03:10 USER Display full text of document ranked 6: FT922-5507
{ FT 30 MAY 92 / The Long View: Going for the jugular. WHENEVER I meet Fringe Freddie, I know I am going to start worrying. It's catching.

Either he is getting ready for the biggest boom ever known, or the biggest crash. A quiet life never comes into it. Right now, he is in one of his apocalyptic phases.}
Scroll to line 73 of document ranked 6 (FT922-5507)
"Ah. Fringe Freddie I know I am going to start worrying. It's catching. Biggest crash. Phases. Some kind of warming which kills all the fish off South America. Cycles. Ummm."
Scroll to line 73 of document ranked 6 (FT922-5507)
"Global economy was growing. Let's see how this comes up. I never should have gone back to the weather. Global warming. Was the latest thing to rise up from NT Why. A great tide would arise in a second Great Flood and the hot wind would blow. The date? Well, Nostradamus. The Freddie Cycle was clearly testing its low point. But, in my experience, it never stays down for long. Existing sea level. Hmmm. This was kind of fun."

04:16 USER: Display full text of document ranked 10: FT932-10738
{FT 07 MAY 93 / Technology: Weather-wise property - Worth Watching. Many towns and villages owe their distinctive character to half-timbered houses, but pollution is damaging many of the timbers. The Wilhelm-Klauditz Institute in Braunschweig is investigating ways of halting the damage by modelling the effects of weather on wood in a large-scale climatic simulation unit.}
"Let's see what it says here. Going for the jugular. Worth watching weather-wise. Half-timbered houses. Pollution is damaging many of the timbers. Effects of weather on wood. Nope, don't like that one. It's not even mentioning El Nino. It should at least El Nino."

04:32 USER: Display full text of document ranked 6: FT922-5507
{ FT 30 MAY 92 / The Long View: Going for the jugular. WHENEVER I meet Fringe Freddie, I know I am going to start worrying. It's catching. Either he is getting ready for the biggest boom ever known, or the biggest crash. A quiet life never comes into it. Right now, he is in one of his apocalyptic phases.}
Scroll to line 76 of document ranked 6 (FT922-5507)
"Have to make sure that I keep my finger off this because I keep running it up which is. I have to pull it back again. Effects that they attributed. I'm going to put in. I'm going to keep this one going for the jugular."
Mark as Save document ranked 6 (FT922-5507)
Enter instance: fun document
"Fun document. Okay. We're going to call this one okay." I see weather. Cold weather. Only transient effect.

05:22 USER: "I see weather. Cold weather."
Display full text of document ranked 9: FT941-9011
{FT 17 FEB 94 / Icy weather grips US economic growth. Exceptionally cold weather could cause economic growth in the first quarter to fall short of administration projections, Mr. Ron Brown, commerce secretary, said yesterday. He was reacting to the worst figures for housing starts in a decade.}
"Grips US. Cold weather. Only transient effect. It's actually cold weather could cause economic growth first quarter to fall short of. Oh

gosh, Ron Brown. Ron Brown died."
Scroll to line 19 of document ranked 9 (FT941-9011)

05:44 USER: Scroll summary display
"Economy beats bad weather. Minding your own business. March of '94. Rising prices."
Display full text of document ranked 11: FT941-4499
{FT 10 MAR 94 / Economy beats bad weather in US. The US economy grew modestly at the beginning of this year despite the effects of bad weather and showed little sign of rising prices, the Federal Reserve system said yesterday, Reuter reports from Washington. 'The economy expanded moderately in January and February despite unusually severe weather in the east and the Midwest,' the Fed said in its Beige Book report on national activity.}
Scroll to line 7 of document ranked 11 (FT941-4499)
"Nope."

06:01 USER: Display full text of document ranked 15: FT944-5250
{FT 05 DEC 94 / Clothing sales hit by mild weather. Clothing retailers are waiting anxiously for a spell of cold weather to boost sales of winter clothing in the crucial Christmas period, after the exceptionally warm November left them struggling to meet sales forecasts. The warmest November since records began, coming after a mild October, prompted consumers to postpone purchases of winter clothes such as coats, scarves, gloves and knitwear - with a knock-on effect on other purchases.}
"International. Clothing sales hit by mild weather. A spell of cold weather to boost sales of winter clothing in the crucial Christmas period. This is December of '94. The weather."
Scroll to line 26 of document ranked 15 (FT944-5250)
"What effects (yawn) oh excuse me. No El Nino here."

06:25 USER: Display full text of document ranked 17: FT943-8969
{FT 13 AUG 94 / Sport: Blame the weather - Cricket. Returning from an almost tropical holiday in France, I was not surprised to find everyone in England talking about the hot and humid weather. Especially cricket lovers, since cricket and weather are inseparable and should the cricket fail, the hot weather is an inexhaustible culprit.}
"Blame the weather cricket. Weather weather weather weather."
Scroll to line 36 of document ranked 17 (FT943-8969)
"Let's look for El Nino. Nope. It should say El Nino."

06:39 USER: "Nice days. Technology."
Display full text of document ranked 13: FT942-6380
{ FT 31 MAY 94 / Technology: Forecasters feeling under the weather - Nice days for a white wedding are still unpredictable, despite advances in meteorology. The ability to control the weather has long been the stuff of science fiction novels. But real scientists have a hard enough time predicting conditions more than a couple of days ahead.
"National weather. Nice days for a white wedding are still predictable."
Scroll to line 30 of document ranked 13 (FT942-6380)

06:54 USER: "I think I'm just going to go through here and take off weather. And do my search again. And maybe I'll take some terms out."

07:04 SYS: Submitted query: "El Nino" weather effect
0 positive marked documents, 0 positive feedback terms
0 negative marked documents, 0 negative feedback terms
Result of query evaluation: 150 documents retrieved
Summary display

07:06 USER: "Oh. I can't. I have to do this. I've have to get rid of them. Okay. Return my search."

07:19 SYS: Submitted query: "El Nino"
0 positive marked documents, 0 positive feedback terms
0 negative marked documents, 0 negative feedback terms
Result of query evaluation: 12 documents retrieved
Summary display
"I have a couple of articles here. Shrimp farming."

07:25 USER: Display full text of document ranked 8: FT921-5191
{FT 05 MAR 92 / Commodities and Agriculture: Ecuador shells out on shrimp farming - The consequences of declining fish stocks and over-investment. Ecuador's shrimp farming business had another record year in 1991 as the gap with other fishing exports widened. Groups within the industry, unwilling to acknowledge over-fishing, accuse each other of irrational practices or blame dwindling catches on climate and ocean currents.}
"Ecuadorian fleet. "
Scroll to line 8 of document ranked 8 (FT921-5191)
"Warm southward-flowing El Nino current was responsible for two bad years, the general decline was due to over-fishing and licenses and quota systems were needed to help stocks recover. Over-fishing."
Mark as Save document ranked 8 (FT921-5191)
"Okay. That's useful."
Enter instance: overfishing

07:56 USER: "Okay. World stock. De Beers. Let's take a look."
Display full text of document ranked 9: FT931-13401
{FT 23 JAN 93 / World Stock Markets: De Beers gives JSE a buoyant start to 1993 - But economic hopes are muted. Just as the collapse last August in De Beers' share price was an important
factor in driving down the Johannesburg Stock Exchange, so its recent recovery has helped get the market off to a buoyant start in 1993. The overall index has risen by about 4 per cent in the first three weeks, having closed 1992 down 5.3 per cent on the year. The index closed yesterday up 22 at 3,404.}
Scroll to line 42 of document ranked 9 (FT931-13401)
"El Nino associated with the severe drought has reappeared. Ehhh."

08:19 USER: Scroll summary display
"Oh. That's interesting. I would think if I had effects on El Nino that I would have to have El Nino in it And there's only 12 articles that say El Nino in this document. So I'm going to look at a couple more here and just let it go."

08:51 USER" Display full text of document ranked 12: FT924-2561
{FT 11 DEC 92 / Survey of Ecuador (3): Banana trade faces an uncertain future - Agriculture. BANANA production, the cornerstone of

Ecuador's agriculture, is facing change. Not only are exports threatened by European restrictions, but domestic overproduction, the Sigatoka disease and low per acre productivity
will also demand action by producers.}
Scroll to line 39 of document ranked 12 (FT924-2561)
"Show next passage."
Invoke Show Next Passage button
"Shift in precipitation. The current carries warmer waters to the coast and causes droughts in some parts of the country. I like this one because it talks about additional crop effects."
Mark as Save document ranked 12 (FT924-2561)
"Oops. Okay."
Enter instance: additional crop effects
"This is an okay."

09:32 USER: "And this is an exit. Okay."
Stop search.

3. Further Instructions to Subjects

There were no additional instructions given to our subjects.

4. Data from Common Searcher Questionnaires

Total Number of Subjects: 16

Number of searches performed by each searcher: 8

Pre-Search Questionnaire

1. What high school/college/university degrees/diplomas do you have or expect to have (some subjects will belong to more than one category)?

HS	BS	MLS exp.	MCIS exp.	MA	MLS	Ph.D. exp.	Ph.D.
1 (6.3%)	15 (93.7%)	9 (56%)	1 (6.3%)	2 (12.5%)	4 (25%)	2 (12.5%)	1 (6.3%)

2. What is you occupation?

Student	Librarian	Faculty/Staff	Other
8 (50%)	4 (25%)	2 (12.5%)	2 (12.5%)

3. What is your gender?

Female	Male
11 (69%)	5 (31%)

4. What is your age?

Minimum: 23 Maximum: 58 Mean: 34 SD: 2.74

5. Have you participated in previous TREC Searching Studies?

No	Yes
16 (100%)	0 (0%)

6. Overall, for how many years have you been doing online searching? (Only those years reported appear below)

M=3.59, SD=3.76

1	2	2.5	3	4	5	17
3(18.8%)	3(18.8%)	1(6.3%)	4(25%)	3(18.8%)	1(6.3%)	1(6.3%)

The following questions were answered using a five-point scale where 1=no experience; 3=some experience; and 5=a great deal of experience.

1. How much experience have you had using a point and click interface?

M=4.75, SD=0.68

1	2	3	4	5
0 (0%)	0 (0%)	2 (12.5%)	0 (0%)	14 (87.5%)

2. How much experience have you had searching on computerized library catalogs either locally or remotely?

M=4.18, SD=0.83

1	2	3	4	5
0 (0%)	0 (0%)	4 (25%)	5 (31.3%)	7 (43.8%)

3. How much experience have you had searching on CD ROM systems?

M=3.06, SD=1.48

1	2	3	4	5
3 (18.8%)	3(18.8%)	4 (25%)	2 (12.5%)	4 (25%)

4. How much experience have you had searching on commercial online systems?

M=3.46, SD=0.99

1	2	3	4	5	Missing
1 (6.3%)	0 (0%)	7(43.8%)	5 (31.3%)	2 (12.5%)	1 (6.3%)

5. How much experience have you had searching on World Wide Web search services?

M=4.37, SD=0.80

1	2	3	4	5
0 (0%)	1 (6.3%)	0 (0%)	7 (43.8%)	8 (50%)

6. How much experience have you had searching on other systems?

M=2.16, SD=1.32

1	2	3	4	5	Missing
3 (18.8%)	0 (0%)	2 (12.5%)	1 (6.3%)	0 (0%)	10(62.5%)

The following question was answered using a five-point scale where 1=never; 2=once or twice a year; 3=once or twice a month; 4=once or twice a week; and 5= once or twice a day.

1. How often do you conduct a search on any kind of system?

M=4.43, SD=0.62

1	2	3	4	5
0 (0%)	0 (0%)	1 (6.3%)	7 (43.8%)	8 (50%)

The following statement was rated using a five-point scale where 1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree.

2. I enjoy carrying out information searches.

M=4.31, SD=0.70

1	2	3	4	5
0 (0%)	0 (0%)	2 (12.5%)	7 (43.8%)	7(43.8%)

Post Search Questionnaire

The following questions were answered using a five-point scale where 1=not at all; 3=somewhat; 5=extremely.

1. Are you familiar with this topic?

TOTAL: M=2.03, SD=8.47

1	2	3	4	5
49(38.3%)	32 (25%)	40 (31.3%)	7 (5.5%)	0 (0%)

2 Was it easy to get started on this search?

TOTAL: M=3.09, SD=0.95

1	2	3	4	5
6 (4.7%)	26 (20.3%)	55 (43%)	32 (25%)	5 (9%)

3. Was it easy to do the search on this topic?

4. Are you satisfied with your search results?

TOTAL: M=2.59, SD=1.07

1	2	3	4	5
21 (16.4)	43 (33.6)	35 (27.3)	25 (19.5)	4 (3.1)

5. Are you confident that you identified all the different instances for this topic?

TOTAL: M=2.08, SD=1.10

1	2	3	4	5
51 (39.8)	24 (26.6)	27 (21.1)	13 (10.2)	3 (2.3)

Post-System Questionnaire

The following questions were answered using a five-point scale where 1=not at all; 3=somewhat; 5=extremely.

1. How easy was it to learn to use this information system?

TOTAL: M=3.90, SD=0.83

1	2	3	4	5	Missing
1 (3.1%)	0 (0%)	6 (18.8%)	18 (56.3%)	6 (18.8%)	1 (3.1%)

RUINQ-G: M=4.00, SD=0.65

1	2	3	4	5
0 (0%)	0 (0%)	3 (18.8%)	9 (56.3%)	3 (18.8%)

RUINQ-R: M=3.81, SD=0.98

1	2	3	4	5
1 (6.3%)	0 (0%)	3 (18.8%)	9 (56.3%)	3 (18.8%)

2. How easy was it to use this information system?

TOTAL: M=3.70, SD=0.93

1	2	3	4	5	Missing
1 (3.1%)	2 (6.3%)	7 (21.9)	16 (50%)	5 (15.6%)	1 (3.1%)

RUINQ-G: M=3.86, SD=0.74

1	2	3	4	5
0 (0%)	1 (6.3%)	2 (12.5%)	10 (62.5%)	2 (12.5%)

RUINQ-R: M=3.56, SD=1.09

1	2	3	4	5
1 (6.3%)	1 (6.3%)	5 (31.1%)	6 (37.5%)	3 (18.8%)

3. How well did you understand how to use the information system?

TOTAL: M=3.52, SD=0.92

1	2	3	4	5	Missing
1 (3.1%)	4 (12.5%)	6 (18.8%)	18 (56.3%)	2 (6.3%)	1 (3.1%)

RUINQ-G: M=3.66, SD=0.72

1	2	3	4	5
0 (0%)	1 (6.3%)	4 (25%)	9 (56.3%)	1 (6.3%)

RUINQ-R: M=3.37, SD=1.08

1	2	3	4	5
1 (6.3%)	3 (18.8%)	2 (12.5%)	9 (56.3%)	1 (6.3%)

Exit Questionnaire

The following questions were answered using a five-point scale where 1=not at all; 3=somewhat; and 5=completely.

1. To what extent did you understand the nature of the searching task?

TOTAL: M=3.80, SD=0.67

1	2	3	4	5	Missing
0 (0%)	0(0%)	5 (31.3%)	8 (50%)	2 (12.5%)	1 (3.1%)

2. To what extent did you find this task similar to other searching tasks that you typically perform?

TOTAL: M=2.80, SD=0.86

1	2	3	4	5	Missing
1 (6.3%)	4 (25%)	7 (43.8%)	3 (18.8%)	0 (0%)	1 (3.1%)

3. How different did you find the systems from one another?

TOTAL: M=2.40, SD=0.91

1	2	3	4	5	Missing
1 (6.3%)	9 (56.3%)	4 (25%)	0 (0%)	1 (6.3%)	1 (3.1%)

5. Please rank the two systems in order of how easy they were to learn to use. Place a "1" next to the easier system to learn and a "2" beside the more difficult system to use.

INQ-G System – 1	INQ-G System – 2	
INQ-R System – 2	INQ-R System – 1	Missing
12 (75%)	3 (18.8%)	1 (6.3%)

6. Please rank the two systems in order of how easy they were to use. Place a "1" next to the easier system to learn and a "2" beside the more difficult system to use.

INQ-G System – 1	INQ-G System – 2	
INQ-R System – 2	INQ-R System – 1	Missing
10 (62.5%)	4 (25%)	1 (6.3%)

7. Please rank the two systems in order of which system you liked the best. Place a "1" next to the easier system to learn and a "2" beside the more difficult system to use.

INQ-G System – 1	INQ-G System – 2		
INQ-R System – 2	INQ-R System – 1	Equal	Missing
7 (43.8%)	7 (43.8%)	1 (6.3%)	1 (6.3%)

5. FA-1 Results

Subject	Incorrect	Correct	Total
1	7	29	36
2	10	40	50
3	25	54	79
4	7	31	38
5	10	40	50
6	13	46	59
7	11	36	47
8	15	46	61
9	7	19	26
10	19	38	57
11	17	39	56
12	3	22	25
13	9	22	31
14	9	25	34
15	2	17	19
16	8	15	23