

Contact: Diana Gonzalez

REGENT ADMISSION INDEX (RAI) EVALUATION STUDY REPORT

Actions Requested: Receive the Regent Admission Index (RAI) evaluation study report.

Executive Summary: In light of its mission and stewardship role to provide educational opportunities to the citizens of the state, the Board of Regents has an ongoing interest in ensuring that students who are admitted to the Regent universities are academically prepared to succeed in college. In 2006, after conducting an in-depth study of predictors of success for entering freshmen at the Regent universities, the Admissions Study Team¹ recommended that the existing admissions process (of admitting students who are in the top 50% of their high school graduating class and who have the core subject area course requirements) be replaced with a Regent Admission Index (RAI) using the following equation:

$$\text{Regent Admission Index} = (2 \times \text{ACT composite score}) + (1 \times \text{high school rank}) + (20 \times \text{high school grade point average}) + (5 \times \text{number of high school courses completed in the core subject areas})^2.$$

Students would still be required to complete the core subject area course requirements specified by each Regent university as described in Attachment C. Not only were the four factors good predictors of success, the Regent Admission Index was consistent with the Iowa Department of Education's Iowa core curriculum and was intended to promote rigor in the high school academic curriculum undertaken by students. The Board of Regents approved the Regent Admission Index in December 2006 and directed the Board Office (1) to make the appropriate changes to the Administrative Code and (2) to oversee the implementation of the RAI at the Regent universities with the entering class of 2009. This implementation schedule would allow high schools and students sufficient time to appropriately address the RAI.

The Admissions Study Team recommended periodic reviews of the new admissions process. Upon approval of the new admissions process, the Board directed the Board Office and Regent universities to conduct an evaluation of the process one year after implementation and every two years after that. The purpose of the evaluation conducted during 2010-2011 was to (1) determine if any Iowa population of high school graduates was inappropriately affected by the new admission requirements and (2) to collect feedback from high school counselors regarding the use of the RAI.

This report includes the results of the evaluation of the new admissions process using two dimensions: (1) an analysis of the data of the entering classes of 2009 and 2010; and (2) a survey of high school guidance counselors and principals regarding the effects of the RAI on their students.

¹ The team included Michael Barron and Tom Rocklin (SUI); Kathy Jones and Karen Zunkel (ISU); Phil Patton and Dave Smith (UNI); and Diana Gonzalez (Board Office). Phil Caffrey (ISU) and Dennis Hendrickson (UNI) were active participants in the study.

² For purposes of calculating the Regent Admission Index, the ACT composite score has a top value of 36 (SAT scores are converted to ACT composite equivalents); high school rank is expressed as a percentile with 99% as the top value; high school GPA is expressed on a 4-point scale; and number of high school courses completed in the core subject areas is expressed in terms of years or fractions of years of study. The chosen multipliers were statistically derived.

Background:

The goal of the admissions process is to enroll students at the three Regent universities who have a reasonable probability of academic success. The Team's data analyses showed the importance of using multiple factors in the admissions process. The four factors in the RAI (high school rank, ACT composite score, high school grade point average, and number of core courses undertaken in high school) were shown to predict academic success at the Regent universities and to encourage students to take a rigorous core curriculum throughout their high school careers.

A Regent Admission Index of 245 and completion of the required academic courses guarantees automatic admission at the three Regent universities for all Iowa resident freshman applicants. Non-resident freshman applicants are held to standards at least as high as those for resident freshman applicants.

The individual review process is used in cases where a student does not possess all required factors, e.g., high school rank, GPA. Each Regent university continues to conduct individual reviews of students who do not meet the Regent Admission Index of 245 but who otherwise demonstrate potential and commitment to succeeding at a Regent university recognizing that the traditional measures of academic performance do not adequately describe some students' potential for success. Applicants who feel that their academic record is not an accurate reflection of their potential for success are encouraged to provide supplemental information explaining their circumstances in addition to the application, academic transcripts, and test scores.

After the approval of the RAI by the Board in December 2006, the Board Office and the Regent universities undertook a variety of communication efforts to provide adequate notice to students and the general public about the changes to the admissions process. High school principals and guidance counselors received information and support in the application of the RAI. An online RAI calculator was developed and included on the Board of Regents website and the Regent universities' websites.

RESULTS OF EVALUATION STUDY

In Summer 2010, the Board Office convened an RAI evaluation study team³ to develop the process for collecting and analyzing data regarding the implementation of the Regent Admission Index in Fall 2009. Some of the questions that needed to be addressed included the following: (1) Has the RAI worked to the detriment of any population group, including underrepresented students? (2) How have the four factors contributed to student success? (3) What issues remain to be addressed with high school principals and guidance counselors regarding the continued successful use of the RAI?

³ The team included Michael Barron and Beth Ingram (SUI); Kathy Jones, Karen Zunkel, Phil Caffrey, Marc Harding, and Darin Wohlgemuth (ISU); Phil Patton, Christie Kangas, and Dan Schofield (UNI); and Diana Gonzalez (Board Office).

Part I – Analysis of Entering Freshmen in Fall 2009 and Fall 2010

The tables on the following pages provide a summary of the entering resident freshman classes from Fall 2009 and Fall 2010 admitted under the RAI compared to the entering class of Fall 2008 admitted under the former set of standards. It is important to keep in mind that many factors changed along with the implementation of the RAI and to attribute causality to the change in admission standards alone is not appropriate. The following are highlights from the analysis of the data:

- The mean high school rank remained consistent, while high school GPA and mean ACT rose slightly (see Table 1).
- The percentage of Iowa racial and ethnic minority enrolled freshmen increased over the past three years (see Table 2). Comparisons of any specific ethnic group over time are problematic because the change in federal reporting requirements for race/ethnicity coincided with the implementation of the RAI.
- There was a slight decline in the number of students from smaller Iowa schools who enrolled at one of the Regent universities. However, enrollment comparisons from small schools are problematic over time as a result of consolidations of small, rural school districts. (Table 4)
- The data presented in Tables 5 and 6 indicate that academic success, as measured by GPA, remained constant. The one-year retention rates increased for the entering class of Fall 2009 compared to Fall 2008 (see Table 7). The one-year retention rate for the entering class of Fall 2010 will be available in Fall 2011.
- The Regent universities' market share of Iowa high school graduates who took the ACT test remained constant at 30%.

Part II – Analysis of High School Guidance Counselor Surveys

A web survey was sent to a sample of 338 counselors in both public and private high schools in Iowa and to 43 counselors who serve on the University of Iowa and University of Northern Iowa advisory boards. The purpose of the survey was to measure the acceptance, ease of use, and effectiveness of the RAI by high school counselors in their work with students and parents. A response was received from 121 of the counselors, a response rate of 37%. The following is a summary of the survey's results:

- Iowa high school counselors are supportive of the Regent Admission Index and find it helpful to them in their work with students and parents.
 - Seventy-four percent of the counselors agreed or strongly agreed that the RAI is understandable by students and parents.
 - Eighty-five percent of the counselors agreed or strongly agreed that the on-line RAI calculator is easy to find and use.
 - Eighty-one percent of the counselors agreed or strongly agreed that the RAI is helpful in their work advising students about their curricular choices.

- Seventy-eight percent of the counselors report that the RAI has changed the way they talk to students about their course work.
 - Eighty-two percent of the counselors believe that the RAI supports their district's emphasis on taking a strong curriculum in preparation for college.
 - Seventy-one percent of the counselors believe that the RAI has changed student course selections and/or course-taking patterns.
- Narrative comments provided by high school counselors offer both support of and suggest some changes in how the RAI is represented and used by Iowa's public universities. Emerging themes from these comments include the following:
- The RAI is a beneficial tool for school counselors.
 - The four variables used in calculating the RAI paint a better picture of a student's readiness for college than the former single variable system based on rank-in-class.
 - Counselors generally felt that the RAI supports planning at all levels, but especially with 8th grade students as they build their high school course plan.
 - It is not always obvious to students and parents in some school districts which courses fulfill the core course requirements.
 - Students on block or other non-traditional course scheduling systems may have some difficulty in relating their courses to the core course requirements used in computing the RAI.
 - Students who attend high schools that do not rank are not able to compute an RAI, but the counselors at those schools still find it helpful to them in advising individual students.
 - Students who present a RAI value below 245 may receive different admission decisions when they apply to more than one Regent University because of the individual review process used at each university.

Next Steps

- The Regent universities will continue to collect and analyze data regarding the admission of Iowa high school graduates using the Regent Admission Index. Biennially, the RAI evaluation study team will discuss the data and determine if any recommendations are needed.
- A sub-committee which includes a Board Office representative and a university representative has been working with the Iowa Department of Education to develop an analysis of all the core courses at each Iowa high school which meet the requirements of the RAI. These tables will be made available to the high schools for posting on their websites and/or communicating to students and parents. The tables will be updated on an annual basis. This will address the questions raised by high school counselors about which courses "count" for the RAI. This will also continue to stress the importance to the high schools of using the correct SCED (School Codes for Exchange of Data) codes in classifying courses. An example is provided in Appendix D.
- The Board Office and university representatives will continue to monitor comments provided by Iowa high schools regarding the use of the RAI and respond appropriately.

Table 1: High School Academic Profile: Resident New Freshmen												
	Iowa State University			University of Iowa			University of Northern Iowa			Regent Total		
Entering class of	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010
Mean GPA	3.50	3.54	3.55	3.58	3.58	3.62	3.46	3.47	3.46	3.51	3.53	3.55
Mean Class Rank	77	77	77	77	77	77	71	71	70	75	75	75
Mean ACT	24.5	24.6	24.6	25.0	25.1	25.2	23.0	23.1	23.1	24.2	24.3	24.4
Mean Number of Core Courses	NA	19.4	19.4	20.0	20.0	20.0	18.8	19.0	19.2	NA	19.5	19.5
Mean RAI	NA	292	293	NA	299	302	NA	282	281	NA	291	292
# of New Freshmen with RAI < 245	NA	243	236	NA	66	48	NA	292	299	NA	601	583
% of New Freshmen with RAI < 245	NA	8.5%	8.3%	NA	3.9%	2.7%	NA	16.1%	16.4%	NA	8.9%	8.6%

Table 2: Demographics: Number of Resident New Freshmen Enrolled by Racial / Ethnic Background												
	Iowa State University			University of Iowa			University of Northern Iowa			Regent Total		
Entering class of	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010
African American	50	32	49	35	49	38	51	42	29	136	123	116
American Indian or Alaska Native	10	4	6	8	9	5	3		2	21	13	13
Asian	91	89	80	94	89	80	23	18	9	208	196	169
Hispanic or Latino/a	59	83	85	66	81	94	26	37	34	151	201	213
Native Hawaiian or Pacific Islander		1	2	4	6	6			1	4	7	9
Two or more races	NA	42	45	NA	NA	38		19	32	NA	NA	115
Sub-Total of Minority Students	210	251	267	207	234	261	103	116	107	520	601	635
% Ethnic Minority	7.2%	8.8%	9.3%	9.3%	11.4%	12.4%	5.5%	6.4%	5.8%	7.4%	8.9%	9.4%
White	2,615	2,501	2,502	1,933	1,733	1,770	1,738	1,702	1,717	6,286	5,936	5,989
Not Reported	75	113	88	84	77	69	29	2	9	188	192	166
TOTAL	2,900	2,865	2,857	2,224	2,044	2,100	1,870	1,820	1,833	6,994	6,729	6,790

* Fall 2008 to Fall 2009 had a change in the racial/ethnic background reporting rules.

* SUI changed ethnic reporting groups in Fall 2010.

	Iowa State University			University of Iowa			University of Northern Iowa			Regent Total		
Entering class of	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010
Female	1,349	1,335	1,351	1,166	1,092	1,141	1,146	1,136	1,147	3,661	3,563	3,639
Male	1,551	1,530	1,506	1,058	960	955	724	684	686	3,333	3,174	3,147
Total	2,900	2,865	2,857	2,224	2,052	2,096	1,870	1,820	1,833	6,994	6,737	6,786

	Iowa State University			University of Iowa			University of Northern Iowa			Universities Combined		
Entering class of	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010
1 - 50	336 11.6%	307 10.7%	333 11.7%	199 8.9%	165 8.0%	189 9.0%	251 13.4%	238 13.1%	214 11.7%	786 11.2%	710 10.5%	736 10.8%
51 - 100	635 21.9%	651 22.7%	635 22.2%	429 19.3%	323 15.7%	359 17.1%	474 25.3%	424 23.3%	475 25.9%	1,538 22.0%	1,398 20.8%	1,469 21.6%
101 - 200	809 27.9%	838 29.2%	820 28.7%	357 16.1%	419 20.4%	342 16.3%	376 20.1%	416 22.9%	376 20.5%	1,542 22.0%	1,673 24.8%	1,538 22.7%
Above 201	594 20.5%	592 20.7%	542 19.0%	813 36.6%	779 38.0%	880 42.0%	600 32.1%	579 31.8%	594 32.4%	2,007 28.7%	1,950 28.9%	2,016 29.7%
Not Reported	526 18.1%	477 16.6%	527 18.4%	426 19.2%	366 17.8%	326 15.6%	169 9.0%	163 9.0%	174 9.5%	1,121 16.0%	1,006 14.9%	1,027 15.1%
Total	2,900	2,865	2,857	2,224	2,052	2,096	1,870	1,820	1,833	6,994	6,737	6,786

Table 5: Academic Performance: Average First Term GPA												
	Iowa State University			University of Iowa			University of Northern Iowa			Universities Combined		
Entering class of	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010
Mean GPA	2.66	2.71	2.71	2.93	2.91	2.89	2.89	2.90	2.92	2.80	2.82	2.82

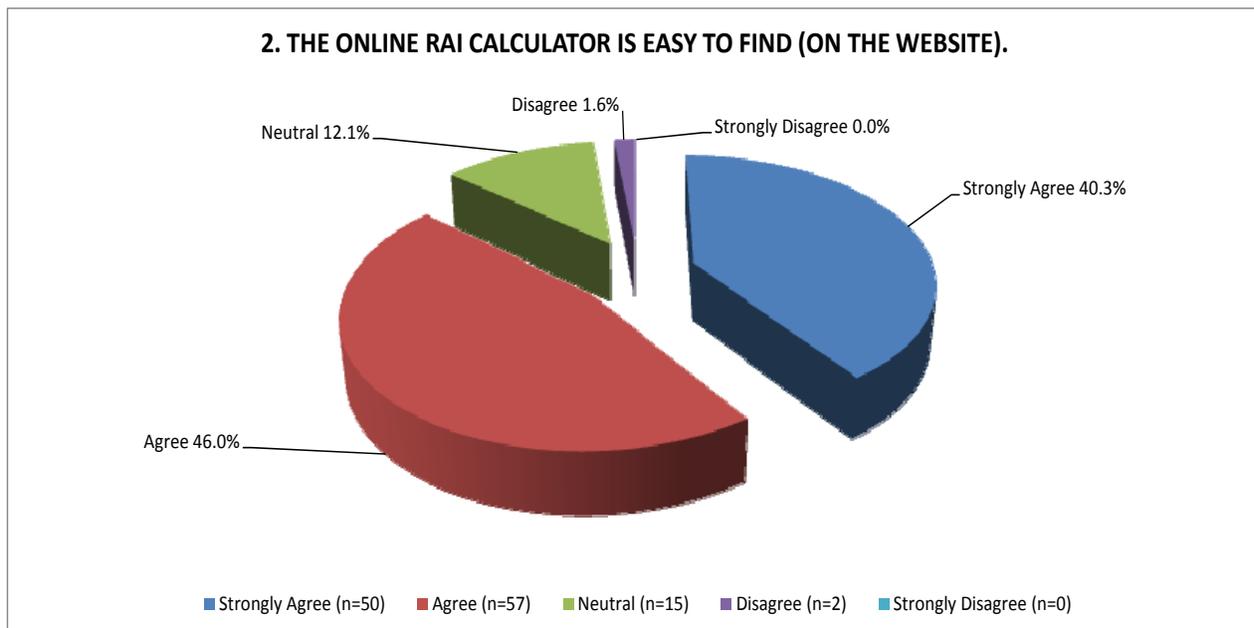
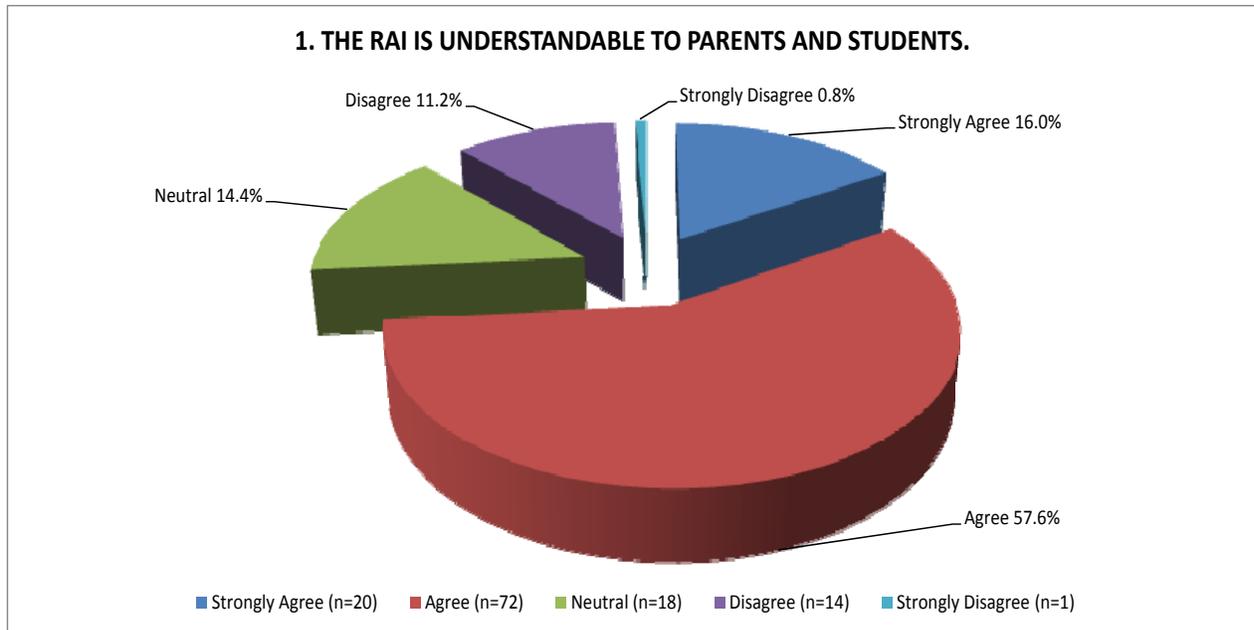
Table 6: Academic Performance: Average First Year Cumulative GPA												
	Iowa State University			University of Iowa			University of Northern Iowa			Regent Total		
Entering class of	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010
Mean GPA	2.76	2.78	NA	2.85	2.77	NA	2.94	2.95	NA	2.83	2.82	NA

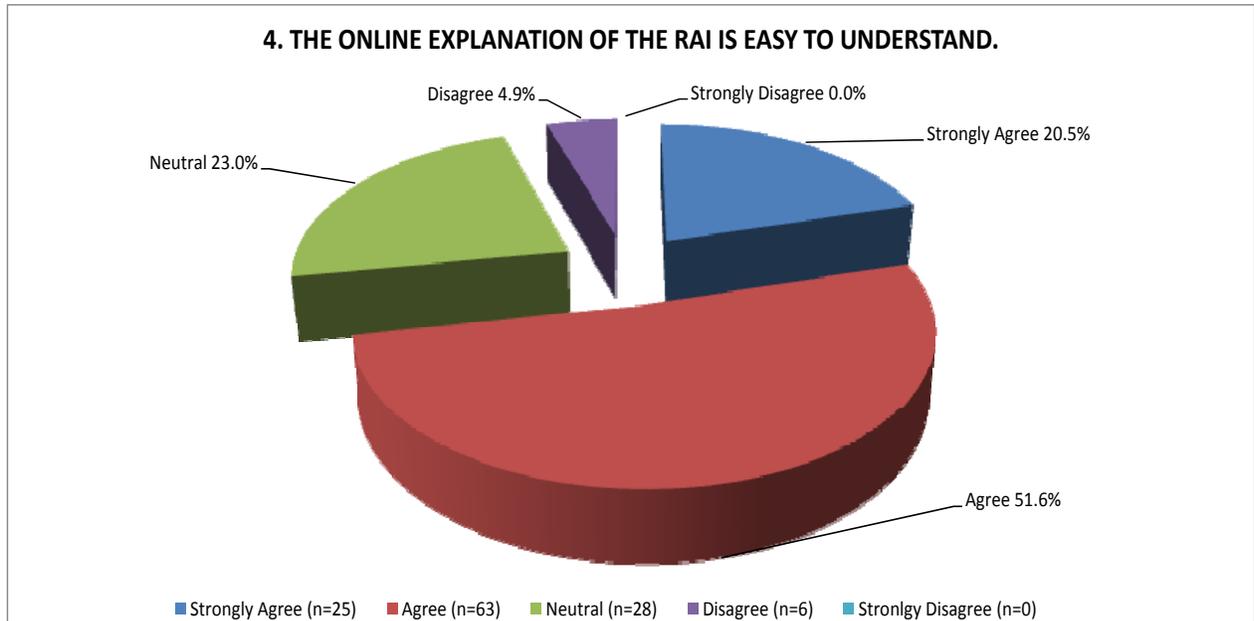
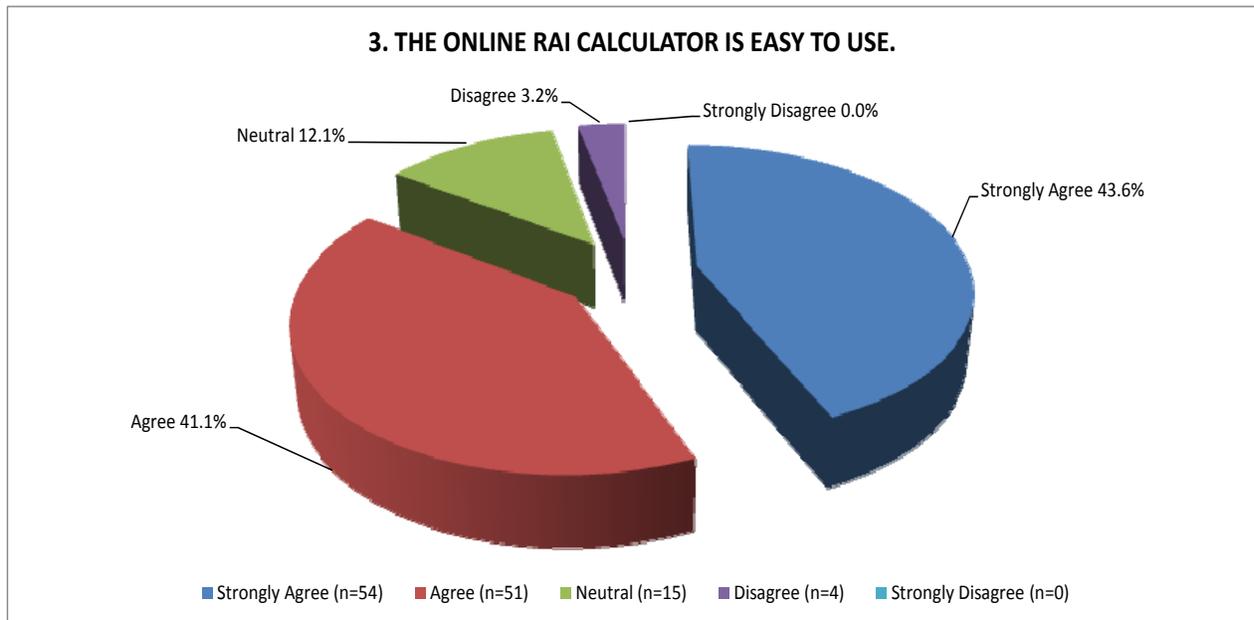
Table 7: Academic Performance: First-Year Retention												
	Iowa State University			University of Iowa			University of Northern Iowa			Regent Total		
Entering class of	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010
1st Yr Retention Rate	85.2%	87.0%	NA	82.3%	85.0%	NA	81.5%	82.5%	NA	83.3%	85.2%	NA

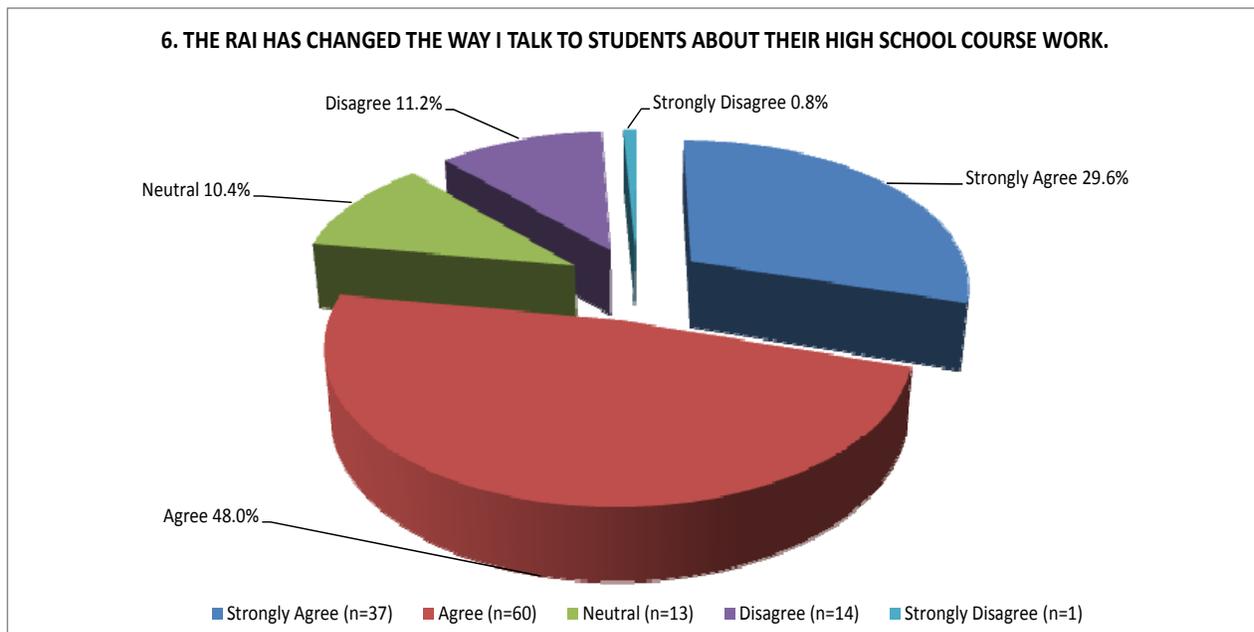
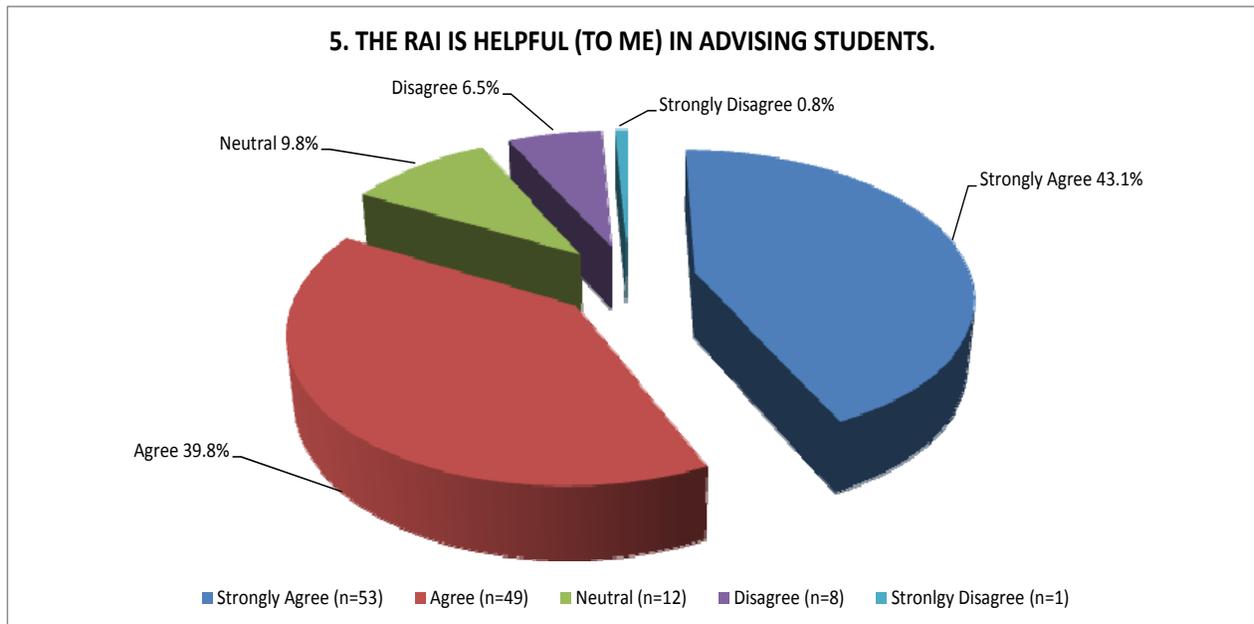
Table 8: Market Share of Iowa ACT Tested High School Graduates												
	Iowa State University			University of Iowa			University of Northern Iowa			Regent Total		
Entering class of	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010	Fall 2008	Fall 2009	Fall 2010
Market Share	13%	13%	12%	10%	9%	9%	8%	8%	8%	30%	30%	30%
Iowa ACT Test Takers*	22,950	22,377	22,943	22,950	22,377	22,943	22,950	22,377	22,943	22,950	22,377	22,943

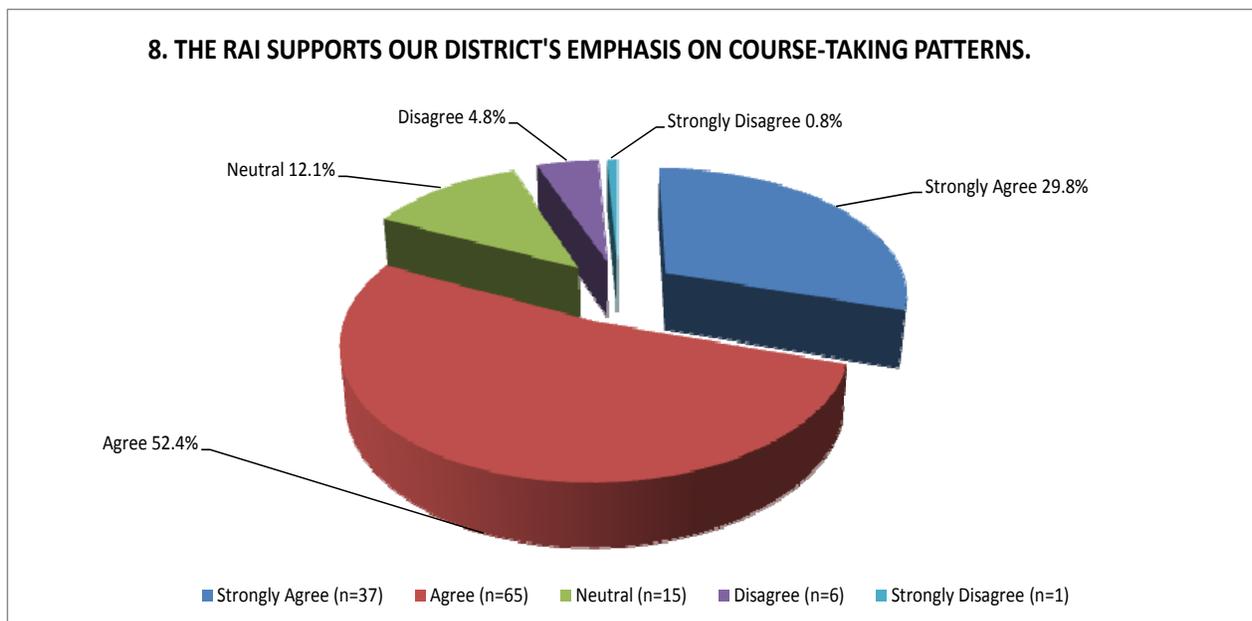
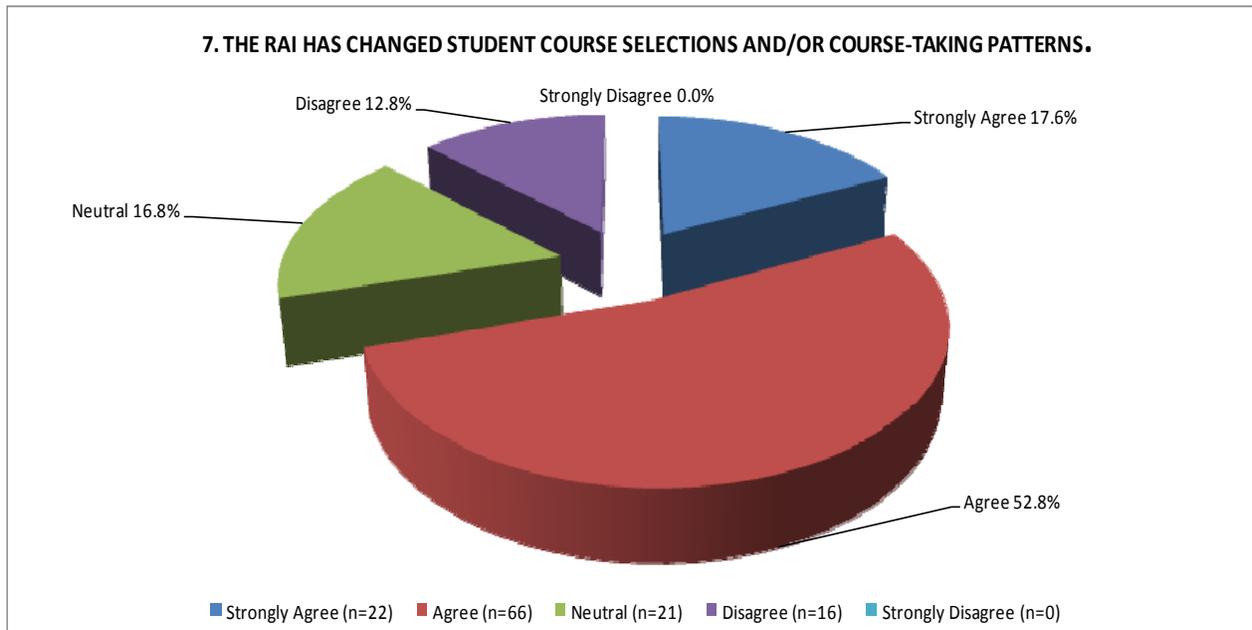
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POPULATION: Iowa High School Guidance Counselors

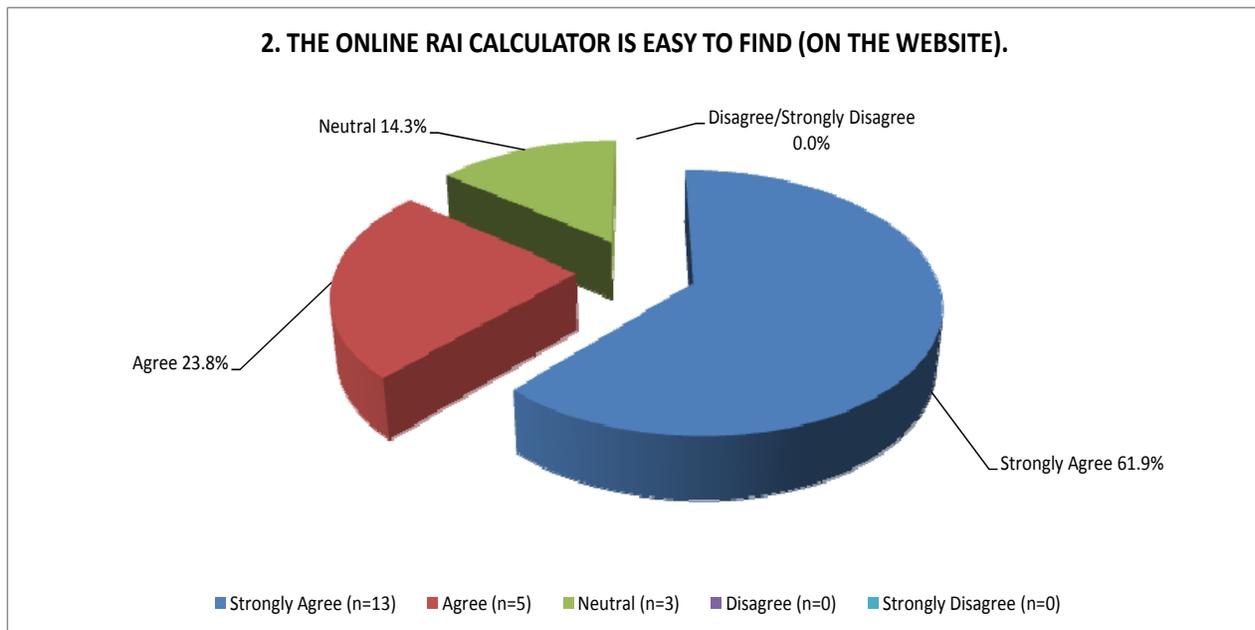
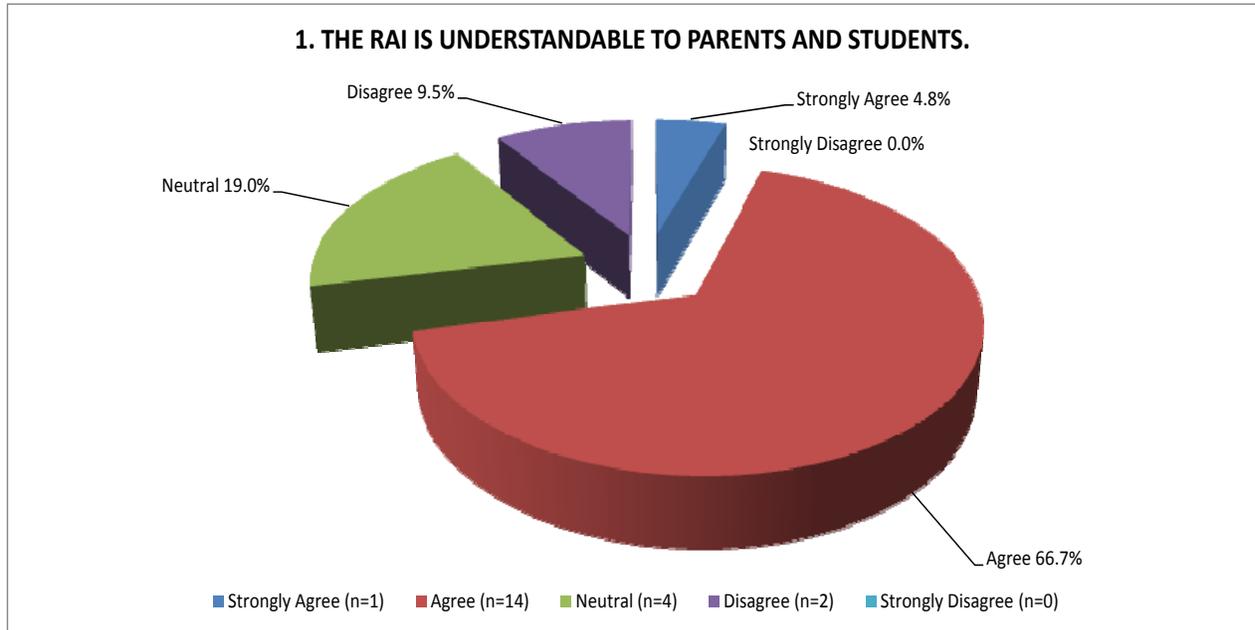


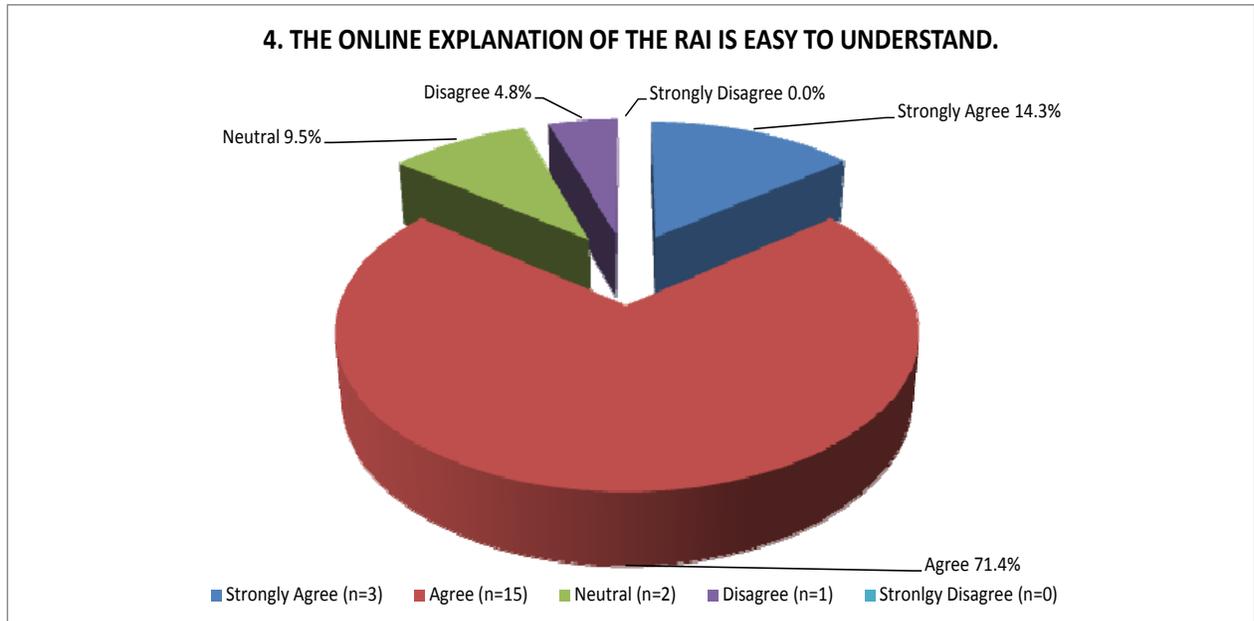
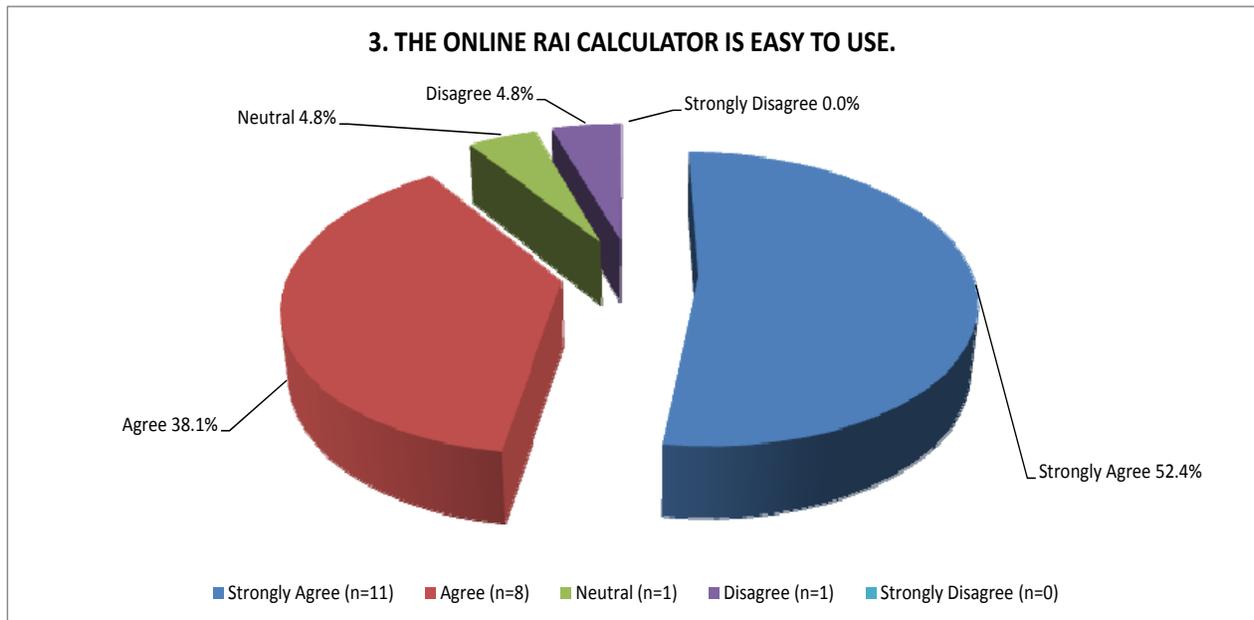


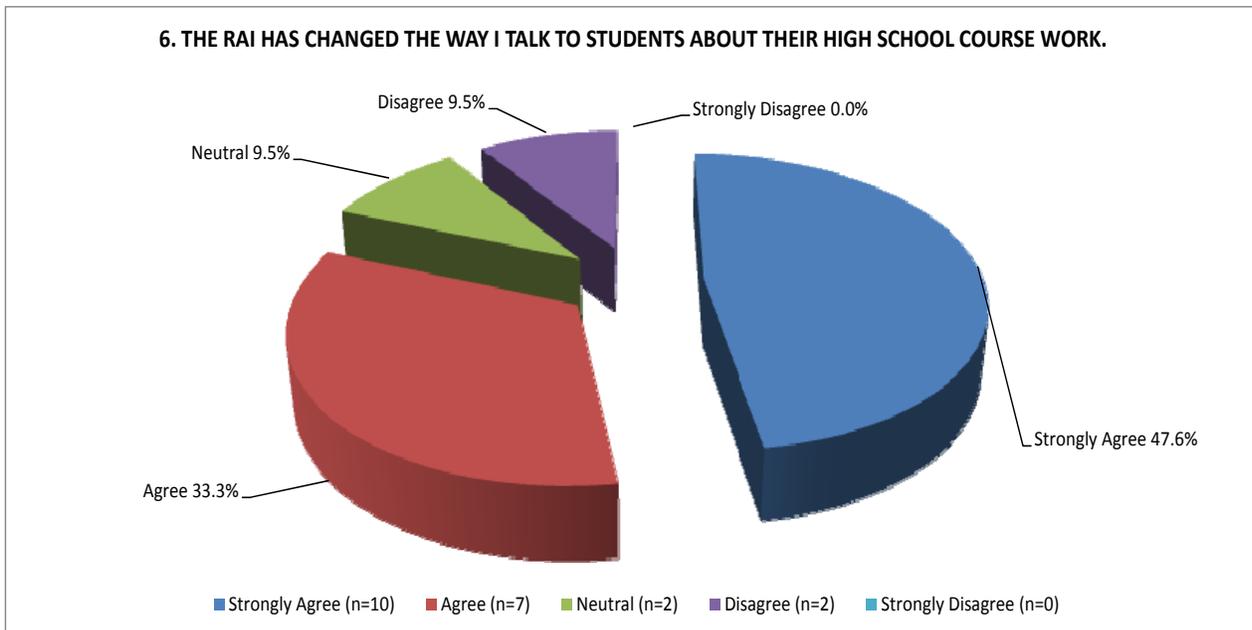
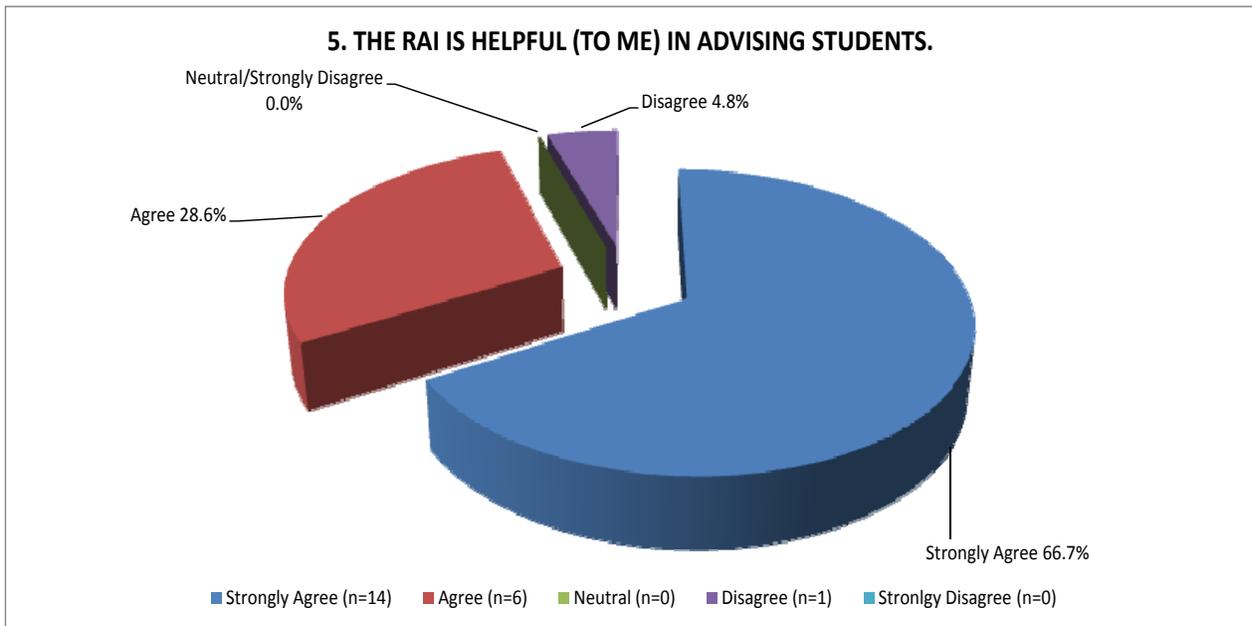


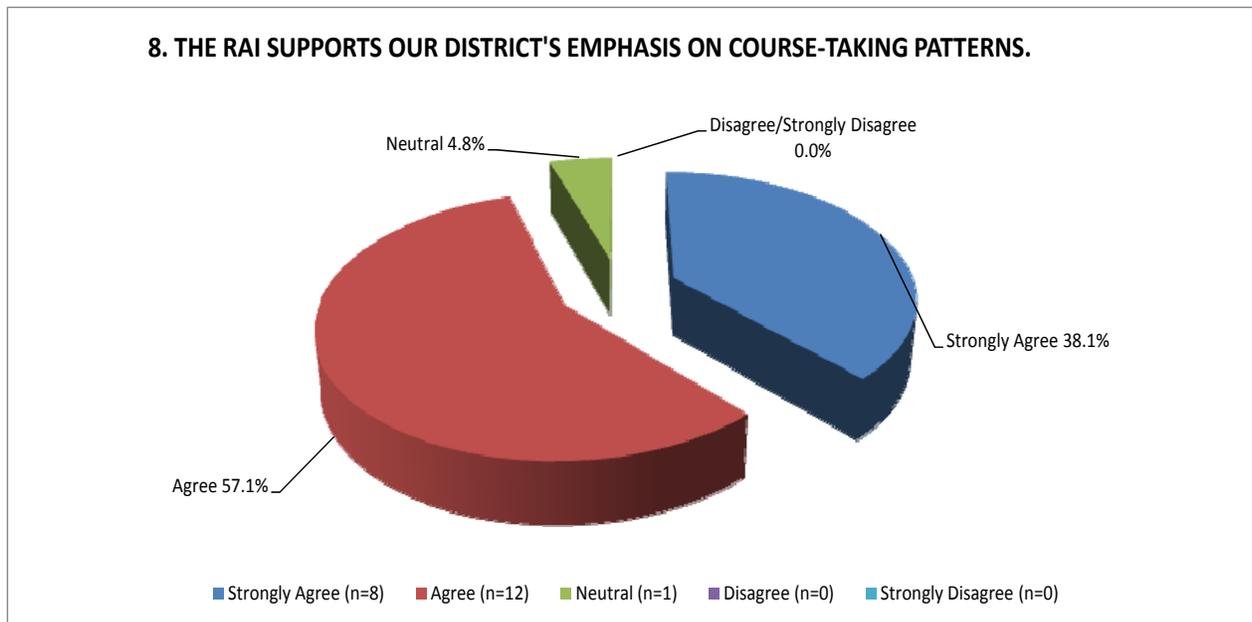
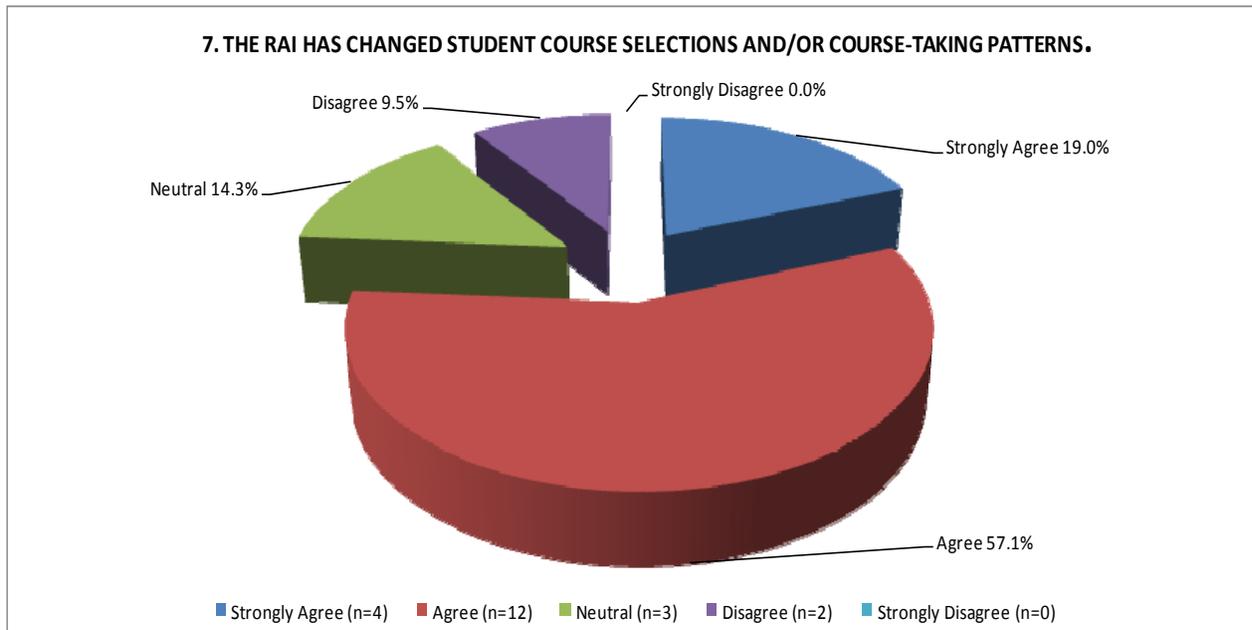


POPULATION: High school counselors serving on advisory boards at the University of Iowa and the University of Northern Iowa (n=43).









Sample comments provided by **high school counselors** to evaluate the effectiveness of the RAI or communications about it.

- ◇ “The RAI would be a valuable tool if students had a way to measure themselves each year in their progress towards an acceptable score. However, most students don’t understand or have the ability to calculate the RAI until the end of junior year in which case it’s too late to do a lot about it beyond adding core courses for senior year. Laying out concrete guidelines/requirements gives them a better grasp of what’s expected from the beginning.
- ◇ How do contracted and PSEO classes fit into the RAI?
- ◇ LOVE IT.
- ◇ If possible, I would like to get a list of the all of the different course classes that counts towards core classes when calculating the RAI score.
- ◇ I believe the RAI helps students to set goals for themselves. We introduce this to our 8th grade students so they understand the importance of course planning.
- ◇ I wish there was some value to students taking elective courses as they help shape a student and make their education and experience well-rounded. If there could be some number assigned to elective courses in the RAI formula that would be important to high schools and students looking to learn more about individual disciplines.
- ◇ We do not rank students, so we can’t plug them into the formula. This leads to some confusion but is a direction our district opted to go.
- ◇ I believe the RAI index paints a better picture of a student’s college readiness and abilities vs. ACT/Class Rank.
- ◇ Calculating core classes when based on a modified block schedule is difficult. What constitutes a year/semester? Maybe an example of this would be useful.
- ◇ I think for school counselors the RAI has been very beneficial and useful. It has certainly helped aid students in the process of selecting courses. However, I am not sure if parents and students find it equally as useful or helpful. The core course requirements are easy for me to do because I know which courses those are, many times I have had students and parents guessing and inaccurately recording the number of core courses leading to an inaccurate RAI score which many times is higher than the score that I would come up with. This makes it difficult for students and parents to understand sometimes.
- ◇ I believe this is a more fair way to meet admissions requirements.
- ◇ I think it has made it has made the process more specific and it is more fair than the old system. It has given some students a way for them to raise their score through core classes that they know beforehand will count.
- ◇ I like the index as a measure of the rigor of classwork, but acknowledge that it fits people who excel in math and science, but not the more liberal arts ready individual.
- ◇ The RAI has decreased the focus on GPA and allowed students to take a chance on challenging courses without feeling like it will break their chances to get into a particular school. Just wish scholarship programs would run this way as well.
- ◇ Love the RAI. It makes the admissions process more black and white! It also encourages students to take more core courses.
- ◇ The RAI works very well for a school our size. It helps our students who were on the bubble of the top ½ and have strong GPAs but were unable to get in before. It also encourages our students to take more core classes.”

Sample comments provided by **advisory board members** to evaluate the effectiveness of the RAI or communications about it.

- ◇ “If there is anyway the universities can communicate what it is, how to use it, why it is being used, etc. across to parents in an easy way for them to understand that would be helpful for high schools. Thank you.
- ◇ I have taken the RAI and translated it into a worksheet with our core courses listed so our students can easily add their core classes and walk step by step through the calculation. I also use this worksheet for sophomores using their 4-year plan and their PLAN test results with a predicted ACT score.
- ◇ In explaining to students and parents, the only confusion comes from what the core courses are and that a semester course is .5 not 1 credit. I stress this all the time. So I think the parents and students are catching on. I talk about RAI all the time to students. I know students changed their 2nd semester schedule to reflect more core courses. I worry a little about our vocational courses...which also provide career preparation. I also use the web site calculator all the time also. Thank you.
- ◇ I find math and foreign language continue to be the biggest hurdles with students and parents.
- ◇ There is still some confusion among a few of our parents and students about what courses constitute core or credited courses for the RAI. I found out by accident that one of our core courses was not being counted toward the RAI because those who assigned the course number had not chosen a number that met certain criteria. The fact that not everyone in the system is working with the same information sometimes trips us up. In the end, we have not had any problems that we know of because I have been able to call admissions and talk to them directly if any of our students are denied acceptance based on their RAI score.
- ◇ The RAI has helped to take away “gray” areas of admissions. Families have a better understanding of the requirements for admissions to the Regent Universities.
- ◇ I think the RAI has helped with students who would before apply but had no or little chance of admission.”

High School Course Requirements for Admission

In addition to the requirements stated previously, freshman applicants must also meet the minimum high school course requirements for their institution of choice as indicated below.

Subject Area	Iowa State University	University of Iowa	University of Northern Iowa
Foreign Language	Two years of a single foreign language for admission to the College of Liberal Arts and Sciences . This requirement will also apply to the College of Engineering beginning Fall 2009. Foreign language courses are not required for admission to the Colleges of Agriculture, Business, Design, or Human Sciences .	Two years of a single foreign language.	Foreign language courses are not required for admission. However, two years of a foreign language in high school with a C- or above in the last term will meet the university graduation requirement.
English/ Language Arts	Four years of English/Language Arts emphasizing writing, speaking, reading, as well as an understanding and appreciation of literature.	Four years, with an emphasis on the analysis and interpretation of literature, composition, and speech.	Four years, including one year of composition; also may include one year of speech, communication, or journalism.
Math	Three years, including one year each of algebra, geometry, and advanced algebra.	Three years, including two years of algebra and one year of geometry, for admission to the College of Liberal Arts and Sciences . Four years, including two years of algebra, one year of geometry, and one year of higher mathematics (trigonometry, analysis, or calculus), for admission to the College of Engineering .	Three years, including the equivalent of algebra, geometry, and advanced algebra.
Natural Science	Three years, including one year each from any two of the following: biology, chemistry, and physics.	Three years, including one year each from any two of the following: biology, chemistry, and physics for admission to the College of Liberal Arts and Sciences . Three years, including at least one year of chemistry and one year of physics for admission to the College of Engineering .	Three years, including courses in general science, biology, chemistry, earth science, or physics; laboratory experience highly recommended.
Social Sciences	Two years for admission to the Colleges of Agriculture, Business, Design, Human Sciences, and Engineering . Three years for admission to the College of Liberal Arts and Sciences .	Three years, with U.S. history and world history recommended, for admission to the College of Liberal Arts and Sciences . Two years, with U.S. history and world history recommended, for admission to the College of Engineering .	Three years, including courses in anthropology, economics, geography, government, history, psychology, or sociology.
Other Courses	Specific elective courses are not required for admission to Iowa State University.	Specific elective courses are not required for admission to the University of Iowa.	Two years of additional courses from the required subject areas, foreign languages, or fine arts.

Note: Non-resident freshman applicants may be held to higher standards for admission, but must meet at least the same requirements as resident freshman applicants.

SAMPLE HIGH SCHOOL CORE COURSE CHART (to find the total number of the appropriate core units):

ENGLISH		MATH		SCIENCE		SOCIAL STUDIES		WORLD LANGUAGES	
English I	1	Algebra I	1	Earth Science	1	American History	1	Spanish I	1
English II	1	Geometry	1	Biology	1	World History	1	Spanish II	1
English III	1	Algebra II	1	Chemistry	1	Psychology	0.5	Spanish III	1
Communication I	0.5	Algebra Plus	0.5	Physics	1	Sociology	0.5	Spanish IV	1
AP English Lit.	1	AP Calculus	1	AP Biology	1	Government	0.5	German I	1
Advanced Comp.	0.5	Trigonometry	0.5	Anatomy & Phys.	0.5	Economics	0.5	German II	1
								German III	1
								German IV	1
TOTAL ENGLISH		TOTAL MATH		TOTAL SCIENCE		TOTAL SOC. STUDIES		TOTAL WORLD LANG.	