

# Does Using *The English Course* Lead to Improvement in Students' Test-taking Skills and Results? – 2009 Update

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## Abstract

This paper discusses the results of an ongoing research project and survey which is evaluating first-year Japanese university English majors enrolled in communicative English speaking and writing classes using *The English Course – Speaking Book 1* and *The English Course – Writing Book 1*. The initial study was designed to evaluate if and, to what extent, adding integrated and TOEIC-comparable Computer Assisted Language Learning (CALL) listening, structure and vocabulary activities to Communicative Language Teaching (CLT)-based English skills courses, would improve students' test-taking skills and overall test results. The overall findings are that most students who used both courses showed improvement in their TOEIC scores.

After evaluating the results of the completed study, the authors will describe the results of end-of-term questionnaires designed to help improve the quality of the online component of *The English Course*.

## Introduction

During the university year April 2008 to March 2009, 105 first-year Japanese university English majors who had enrolled in communicative English speaking and writing classes using *The English Course – Speaking Book 1* and *The English Course – Writing Book 1* were tested and surveyed. Results of the first three tests were published in the paper *Does Using The English Course Lead to Improvement in Students' Test-taking Skills and Results* (Bunkyo Journal 2009). Since then students have been given a final (end-of-term) mock, mini-test, and were also surveyed about the course.

## The Research Project

The research project was designed to evaluate if and, to what degree, the TOEIC-friendly CALL activities described in the introduction, would improve students TOEIC scores.

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### *Students and Their Learning Environment*

The 105 students who were studied for this project were enrolled in two separate classes, using *Speaking Book 1* in one class and *Writing Book 1* in the other class. Almost all of the students were first-year students, majoring in a number of disciplines, none of which was English. All of the students were taking mandatory courses at a large, private university in Tokyo, Japan. The classes were nominally streamed but, in reality, consisted of students of mixed English ability. As will be seen in more detail below, almost all of the students could be categorised as being at false-beginner or lower intermediate level. In TOEIC terms, these students would be at the Brown level, (a score between 220 – 465). Classes were also co-educational and met once a week for a ninety-minute session. Students were not enrolled in any other communicative-based English classes and were not taking any formal TOEIC-related classes at the university. It is not clear how many of the students were engaged in TOEIC-related classes formally or informally outside of the university. Most of the students had a computer and access to the Internet at home.

### *Evaluation Method*

Students took a mock, mini TOEIC test on three occasions, as follows: (1) at the outset of the first semester of the course, before any sessions using *The English Course*; (2) at the end of the first semester, having completed the first four units of *Speaking Book 1* and the first six units of *Writing Book 1*; (3) at the beginning of the second semester, before resuming sessions using *The English Course*. (As described in “Does Using *The English Course* Lead to Improvement In Students’ Test-taking Skills and Results?” (Bunkyo Journal 2009).

The fourth test was given at the end of the second semester, after students had completed the remaining units of both books. Once again an edited version of the TOEIC test was used, so that the test could be completed in one class session. To this end, each section of the test was halved in length. Each student’s scores were then doubled for the purpose of ascertaining where that student would be placed on the TOEIC ‘Can-Do’ table if the student had taken the full test. Each of the tests was created using items modelled from mock tests in several of the many TOEIC practice publications available-in Japan. The following table (Table 1) shows the breakdown by section, question type, time allotment and number of items of a full TOEIC test and of the mini mock TOEIC tests.

**Table 1**

FULL TOEIC TEST			MOCK MINI TOEIC TEST
SECTION I – LISTENING		45 minutes	22 minutes
Part 1	Photographs 4 choices	10 items	5 items
Part 2	Question & Response 3 choices	30 items	15 items
Part 3	Short Conversation 4 choices	30 items (10 x 3)	15 items (5 x 3)
Part 4	Short Talks 4 choices	30 items (10 x 3)	15 items (5 x 3)
SECTION II – READING		75 minutes	38 minutes
Part 5	Incomplete Sentences 4 choices	40 items	20 items
Part 6	Error Recognition 4 choices	20 items	10 items
Part 7	Reading Comprehension 4 choices	40 items	20 items

### Results

Table 2a (below) shows a summary of the results of the ninety-one students who completed all four of the mock mini TOEIC tests. (The full data is included as Table 2b in the appendix.) The scores of students who missed one or more of the tests have been omitted. The table shows the average listening section score, reading section score and total score for each of the tests. The columns on the right side of the table show the change in scores expressed in percentage form. The first percentage shows the difference between test one and test two scores. The second percentage shows the difference between test two and test three scores. The third between test three and four scores. The final percentage shows the difference between test one and test four scores.

**Table 2a**

Key:

Column	Contents	Column	Contents
A	Test 1 average listening score	M	Test 1/Test 2 average score change
B	Test 1 average reading score	N	Test 2/Test 3 average score change
C	Test 1 average total score	O	Test 3/Test 4 average score change
D	Test 2 average listening score	P	Test 1/Test 4 average score change
E	Test 2 average reading score		
F	Test 2 average total score		
G	Test 3 average listening score		
H	Test 3 average reading score		
I	Test 3 average total score		
J	Test 4 average listening score		
K	Test 4 average reading score		
L	Test 4 average total score		

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
175	184	359	192	199	391	195	204	399	200	209	409	9%	2%	2%	12%

It can be seen that at the outset (at the time of taking test one), students were generally weaker on the listening section of the test than on the reading section. It can also be seen that this trend continued through tests two, three and four. Thus, there was no appreciable change in the students' relative strength or weakness between listening and reading over the duration of the research period. However, there was a clear increase in students' total scores. The increase was sufficient to bring the average total score from 360 points, which is well within the TOEIC Elementary level (255-400 points), to 399 points, which is very close to the TOEIC Intermediate level (405-600 points). The total average increase in scores between tests one and four was

twelve percent. The most noticeable difference in scores was an average increase of nine percent between tests one and two. There was only an average increase of two percent between tests two and three scores. There was also only a two percent increase in scores from test three to test four. It should be noted that the average increase between test two and three scores was kept low by twenty students' scores actually falling on test three, while a further nine students' total scores remained unchanged from test two to test three. In contrast, only one student's score had a negative change from test one to test two, and only two students had scores that were unchanged between tests one and two.

### **Analysis of Web Site Use**

After students had completed all classroom and homework assignments for *The English Course* in both of their classes (Speaking and Writing), and taken the fourth and final mock TOEIC test, information was collected from the course web site to analyze the relationship between test results and the time and the frequency spent in online study activities.

The web site for this course was designed, written and produced completely using an open-source software program called *Moodle*, which is free, and available for downloading and adapting by any individual or organization. It is an outstanding tool, designed for building education programs, and will be the predominant program used to develop education courses worldwide in the very near future. Not only does the Moodle program contain all the components necessary to build a CALL course, it also monitors student access and progress for the teacher. All of our students are put into groups assigned to their teacher, and the teacher is able to check on each individual's progress at any time.

One of the benefits of creating web sites within Moodle is the ease of which all individual student data can be collected and evaluated. One of the features allows teachers to see the frequency and amount of time each student has spent online. It is also possible to see how many times a student has attempted each online task. The number of times a student logged in to the web site. Column D of table 3 (below), shows that most students were visiting the web site between one and two times per week (given that the classes were scheduled for 28 weeks in total).

The total number of items (tasks) was 152. Of these, 80 items were part of *Speaking Book 1* and 72 items were part of *Writing Book 1*. All of these items were self-marking and scores were produced objectively as answers were either correct or incorrect. The kinds of items that were included were as follows:

Speaking Book 1:

- 1) gap fill;
- 2) true/false;
- 3) multiple choice;
- 4) re-order the words;
- 5) vocabulary matching;
- 6) skeleton sentences;
- 7) Cloze quiz;
- 8) listening quiz;
- 9) listening comprehension 1;
- 10) listening comprehension 2

Writing Book 1:

- 1) gap fill;
- 2) true/false;
- 3) multiple choice;
- 4) re-order the words;
- 5) skeleton sentences
- 6) vocabulary matching.

There are some further items within the web site, but these require human marking and are therefore prone to subjectivity on the part of the teacher marking them. It was decided to exclude these items from the analysis.

With these items, students are allowed an unlimited number of attempts (except for the true/false tasks). Also, the *Moodle* database is set to record and retain the highest scores each student achieves. This was done to encourage students to practice repeatedly. The students' web site scores are, therefore, not as relevant or important as the number of times a student logs in, the number of items that are attempted and the total number of attempts.

**Table 3**

Key:

Column	Contents
A	Percentage change in average total score between test 1 and test 4
B	Number of students in the score band
C	Average percentage change within this score band
C	Average number of logins to The Study Centre
D	Average number of items attempted at The Study Centre
E	Average number of attempts at The Study Centre

A	B	C	D	E	F
+11% or more	55	16%	51	145	322
+5% to +10%	26	8%	42	127	257
+1% to +4%	2	3%	16	74	143
No change	2	0%	8	23	40
-1% to -4%	3	-2%	7	20	26
-5% to -10%	2	-5%	5	15	18
-11% or more	1	-11%	3	4	4

As could be expected, the results clearly show that in most cases more time spent working on web site activities resulted in better test results and more importantly, a better overall percentage improvement in TOEIC scores between the beginning of course Test 1 and the end of course Test 2. In a few cases, students seem to have spent a good deal of time online without reaching the same level of improvement. It may simply be that those students were often distracted or unfocused while using the web site.

The results of the four tests and the analysis of the relationship between time spent online and TOEIC results indicate that using A) *The English Course* does indeed positively affect students' TOEIC test-taking skills and results. And that B) the amount of time spent using the course's integrated online activities also improves results.

### Student Survey

The authors were encouraged by the results described above for this research project. However, it was felt that improvements could be made to the online content of *The English Course* web site. The focus of such future improvements would be two-fold, A) to improve the content in a way that aids the learning of the target language of *The English Course*, and B) to

change or create new exercises in order to further facilitate improvement of test-taking skills and results, particularly, the TOEIC test. With this in mind, students were surveyed with regard to the online materials (see Table 4 for results). The questions asked were as follows;

1 & 4) Which exercises were the most enjoyable or most interesting?

2 & 5) Which exercises were the most difficult or most boring?

3 & 6) Which exercises were the most useful or most relevant?

For each of these questions, the students answered by selecting from a multiple choice list as follows:

A) gap fill; B) true/false; C) multiple choice; D) re-order the words; E) vocabulary matching; F) skeleton sentences; G) cloze quiz; H) listening quiz; I) listening comprehension 1; J) listening comprehension 2.

**Table 4**

1. In <i>Speaking Book 1</i> , which exercises were the most enjoyable or most interesting?									
A	B	C	D	E	F	G	H	I	J
8	7	6	3	4	3	12	16	15	17
2. In <i>Speaking Book 1</i> , which exercises were the most difficult or most boring?									
A	B	C	D	E	F	G	H	I	J
8	2	5	20	2	7	0	17	15	15
3. In <i>Speaking Book 1</i> , which exercises were the most useful or most relevant?									
A	B	C	D	E	F	G	H	I	J
10	5	7	9	5	3	1	20	15	16
4. In <i>Writing Book 1</i> , which exercises were the most enjoyable or most interesting?									
A	B	C	D	E	F	G	H	I	J
12	14	8	4	8	10	35	N/A	N/A	N/A
5. In <i>Writing Book 1</i> , which exercises were the most difficult or most boring?									
A	B	C	D	E	F	G	H	I	J
20	6	9	26	8	13	9	N/A	N/A	N/A
6. In <i>Writing Book 1</i> , which exercises were the most useful or most relevant?									
A	B	C	D	E	F	G	H	I	J
23	12	15	10	14	8	9	N/A	N/A	N/A



### Results of the survey

A) Interpreting the results of the survey proved to be somewhat difficult and some of the judgements of the authors are subjective. This is because, in retrospect, it was a mistake to group 'most difficult' and 'most boring' into one question. Also, items I & J are identical activities, so the scores for those items should really be combined as one. There is also the anomaly that *Speaking Book 1* activities including listening while *Writing Book 1* activities do not. As a result, for Writing Book 1, votes for most interesting activities were transferred to other activity types, notably the Cloze activity.

B) The authors were pleased to learn that, generally speaking, the listening exercises were chosen to be the most enjoyable. A great deal of effort was invested in creating authentic audio and video activities for the course in order to encourage students to enjoy learning. In addition, these listening exercises are designed to be similar to those used in the TOEIC test, and therefore students are learning to enjoy exercises which are extremely useful for improving their test-taking skills and results. As can be seen from the results, the cloze quiz item was also popular. This may be because students feel confident knowing that the correct answer is amongst those given. In addition, it may be that students appreciate the fact that this section resembles the kind of multiple-choice tasks associated with the TOEIC test.

C) Having worked with students on many occasions with each of the web site exercises, the authors were not surprised that 4) re-order the words, was considered the most difficult or most boring section. The authors feel that this may be partly because this exercise is relatively time-consuming compared to other sections. However, the main reason could also be that students must concentrate carefully in order not to get incorrect answers. Any mistakes in punctuation, spacing, or spelling will result in a false answer. Sadly, perhaps many students find this too troublesome.

D) When considering the data in Table 2 showing that students are generally weaker on the listening section of the TOEIC test, it is perhaps understandable that the listening sections were considered to be most useful or most relevant. This is especially encouraging as these exercises are neither easy nor quick for students to complete. The authors were also encouraged to see that students chose such a wide range of activities in this category.

### Discussion

Improving the web site and making it more TOEIC relevant

After analysing these results the authors have been considering how best to adjust and improve *The English Course* integrated online web site.

### Adding material

The DVD for *The English Course – Speaking Book 1* includes an introductory section called *Start Up*. This section is a set of revolving pictures which introduce the characters and situations/locations for the DVD videos contained in each unit. The authors believe that this material would be ideal for adding to the integrated web site in the same form as the TOEIC picture listening section. Adding this section to the already existing interviews (Question & Response), and conversation/narration material (short conversation) (short talks), would enable students to practice all aspects of the TOEIC listening section.

### Adjusting material

Another idea under consideration is to adjust the length of some of the web site grammar practice sections. In most cases this would mean lengthening some of the more relevant and popular exercises. In particular, the authors intend to double the number of items included in the cloze quiz and multiple-choice sections, which are comparable to the ‘incomplete sentence’ section of the TOEIC test.

The authors also feel that by adding items to the existing True/False section and adjusting the material, this could easily be rewritten to more accurately reflect the ‘error recognition’ section on the TOEIC test.

Another way in which the web site material could be adjusted to reflect the requirements of the TOEIC is to adjust existing material to add more time-limited material. In the TOEIC a major feature of the test is the time limits imposed on students to prepare and to respond to the tasks. Any of the quizzes, assignments or tests in *The English Course* web site can be given a time limit for completion.

A TOEIC Speaking Test has also been introduced recently. The skills and aptitude needed for successfully completing this test are of a particularly high level. Most university-level Japanese speakers of English would find this test extremely difficult. However, within *The English Course* there are numerous and frequent opportunities to practise skills that would make the TOEIC Speaking Test easier to handle. In particular, the role play activities (Act 2 and Act 4) and the Intermission section provide the same kind of challenge that a student meets when taking the TOEIC Speaking Test. Namely, to speak on a topic, or for a purpose, with a limited time to prepare for and to accomplish the task. With a minimal amount of adjustment, the relevant sections of *The English Course – Speaking Book 1* can be adapted to help prepare students for these TOEIC tasks.

One of the aspects of how the TOEIC test is evolving is its increasing reliance on the Internet for testing. The afore-mentioned TOEIC Speaking Test relies on the Internet for delivery and

retrieval of students' test materials. Arguably, students who are used to using the Internet for educational purposes, will do better than those who do not have Internet experience and competence.

### **Conclusion**

The original research question was, "Does Using *The English Course* Lead to Improvement In Students' Test-taking Skills and Results?" The authors feel that the data, collected from four tests conducted during the entire academic year, clearly shows that the answer to this question is, "Yes, using *The English Course* does lead to improvement in students' test-taking skills and results?" In addition, as could be expected, the more often that students logged in to the web site and the longer they spent on line also affected the amount of improvement they showed in the mock tests given.

The authors also feel that due to the diversity of the materials available, students who are studying both *Speaking Book 1* and *Writing Book 1* would achieve the best results in improvement of their test-taking skills and results.

After both reviewing student feedback to the end-of-course survey, and also considering how the CALL components of *The English Course* relate to TOEIC style activities, the authors have designed an outline plan for changes to the materials that they believe can further improve students' test-taking skills and results. As detailed above, these changes include both adding new activities and also adjusting already existing material. Subsequently, the integrated CALL components of all future textbooks comprising *The English Course*, for example, *Listening Book 1*, *Speaking Book 2*, *Writing Book 2*, would be designed in the same manner.

Finally, in time, after the aforementioned changes have been completed, the authors would like to conduct further tests and surveys to evaluate if indeed, and if so, to what extent, these proposed changes do improve students' test-taking skills and results.

Appendix – Table 2b

Column	Contents	Column	Contents
A	Student ID	N	Test 1/Test 2 score change
B	Test 1 listening score	O	Test 2/Test 3 score change
C	Test 1 reading score	P	Test 3/Test 4 score change
D	Test 1 total score	Q	Test 1/Test 4 score change
E	Test 2 listening score	R	Number of logins
F	Test 2 reading score	S	Number items attempted
G	Test 2 total score	T	Total number of attempts
H	Test 3 listening score		
I	Test 3 reading score		
J	Test 3 total score		
K	Test 4 listening score		
L	Test 4 reading score		
M	Test 4 total score		

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
ID	T1			T2			T3			T4										
	LIS	RDG	TOT	LIS	RDG	TOT	LIS	RDG	TOT	LIS	RDG	TOT	T1/T2	T2/T3	T3/T4	T1/T4	LOGIN	ITEMS	ATTEMPTS	
1	170	200	370	190	210	400	190	215	405	195	220	415	8%	1%	2%	11%	45	92	144	
2	170	150	320	190	160	350	200	180	380	220	225	445	9%	9%	15%	28%	42	108	240	
3	160	195	355	190	220	410	190	220	410	190	210	400	15%	0%	-3%	11%	53	138	221	
4	200	135	335	220	155	375	220	165	385	225	160	385	12%	3%	0%	13%	35	139	205	
5	210	170	380	215	185	400	225	190	415	235	200	435	5%	4%	5%	13%	42	119	202	
7	150	190	340	170	200	370	175	210	385	190	220	410	9%	4%	6%	17%	58	152	304	
8	180	200	380	195	210	405	195	220	415	190	225	415	7%	2%	0%	8%	21	60	98	
9	175	200	375	190	220	410	200	225	425	210	225	435	9%	4%	2%	14%	43	141	276	
10	140	175	315	160	185	345	165	185	350	160	180	340	10%	1%	-3%	7%	20	72	89	
11	140	160	300	180	200	380	185	210	395	190	220	410	27%	4%	4%	27%	54	152	263	
12	190	210	400	210	240	450	215	245	460	220	250	470	13%	2%	2%	15%	34	140	189	
13	200	180	380	190	190	380	190	190	380	185	190	375	0%	0%	-1%	-1%	3	15	21	
15	210	175	385	220	190	410	230	200	430	235	215	450	6%	5%	4%	14%	37	104	157	
16	190	190	380	195	210	405	195	210	405	200	220	420	7%	0%	4%	10%	42	151	158	
17	175	190	365	190	220	410	190	215	405	195	215	410	12%	-1%	1%	11%	29	138	231	
20	155	190	345	170	190	360	170	195	365	180	205	385	4%	1%	5%	10%	36	125	175	
21	135	165	300	150	170	320	145	170	315	165	190	355	7%	-2%	11%	15%	36	150	218	
22	205	215	420	220	230	450	220	240	460	220	245	465	7%	2%	1%	10%	46	146	202	
23	145	170	315	160	180	340	165	185	350	120	180	300	8%	3%	-17%	-5%	5	20	21	
24	155	190	345	185	195	380	190	200	390	210	220	430	10%	3%	9%	20%	45	152	301	
25	185	185	370	200	210	410	200	220	420	215	225	440	11%	2%	5%	16%	58	152	217	
26	190	230	420	210	250	460	210	255	465	210	260	470	10%	1%	1%	11%	32	145	221	
27	185	205	390	200	210	410	210	220	430	210	220	430	5%	5%	0%	9%	37	152	165	
30	205	140	345	230	165	395	235	160	395	245	185	430	14%	0%	8%	20%	54	152	318	
31	155	170	325	165	180	345	165	190	355	180	190	370	6%	3%	4%	12%	32	132	198	
32	190	125	315	210	130	340	205	140	345	210	145	355	8%	1%	3%	11%	36	143	201	
33	180	150	330	200	175	375	195	170	365	205	175	380	14%	-3%	4%	13%	45	151	243	
34	165	140	305	175	150	325	170	150	320	175	150	325	7%	-2%	2%	6%	15	109	180	
35	165	160	325	185	165	350	190	175	365	200	185	385	8%	4%	5%	16%	22	123	242	
36	210	220	430	225	220	445	225	220	445	230	230	460	3%	0%	3%	7%	26	134	207	
37	160	190	350	180	200	380	185	205	390	190	200	390	9%	3%	0%	10%	32	141	217	
38	175	195	370	180	210	390	185	210	395	185	210	395	5%	1%	0%	6%	30	124	214	
39	230	245	475	245	250	495	255	250	505	260	245	505	4%	2%	0%	6%	32	144	230	
40	100	130	230	120	145	265	125	155	280	145	170	315	15%	6%	11%	27%	60	152	475	
41	200	170	370	210	180	390	210	185	395	215	190	405	5%	1%	2%	9%	43	102	306	
42	180	190	370	195	205	400	195	200	395	200	200	400	8%	-1%	1%	8%	39	111	309	
43	170	200	370	180	210	390	185	205	390	160	190	350	5%	0%	-11%	-6%	5	10	14	
44	155	190	345	180	190	370	180	195	375	200	200	400	7%	1%	6%	14%	48	142	252	
45	170	160	330	190	175	365	195	165	360	190	160	350	11%	-1%	-3%	6%	26	98	160	
47	215	150	365	225	160	385	245	190	435	255	220	475	5%	13%	8%	23%	43	152	406	
48	170	185	355	180	180	360	180	205	385	190	200	390	1%	7%	1%	9%	52	130	278	
49	200	220	420	230	260	490	225	260	485	225	265	490	17%	-1%	1%	14%	38	137	265	
51	155	190	345	190	200	390	195	210	405	215	220	435	13%	4%	7%	21%	45	150	342	
53	180	220	400	190	220	410	190	225	415	190	225	415	3%	1%	0%	4%	17	100	165	
54	160	140	300	180	165	345	190	170	360	210	190	400	15%	4%	10%	25%	62	151	398	
56	165	200	365	175	210	385	180	215	395	190	220	410	5%	3%	4%	11%	56	146	301	
57	125	150	275	135	170	305	145	150	295	160	160	320	11%	-3%	8%	14%	52	152	354	
58	180	185	365	175	195	370	175	180	355	180	185	365	1%	-4%	3%	0%	6	23	45	
59	165	185	350	180	210	390	190	215	405	190	210	400	11%	4%	-1%	13%	50	150	264	
60	210	220	430	230	250	480	230	255	485	250	260	510	12%	1%	5%	16%	68	152	409	
61	170	200	370	200	230	430	210	250	460	210	260	470	16%	7%	2%	21%	52	149	389	
62	170	240	410	185	255	440	185	250	435	190	255	445	7%	-1%	2%	8%	43	145	348	
63	215	155	370	220	185	405	225	200	425	230	205	435	9%	5%	2%	15%	65	152	403	
64	170	205	375	180	215	395	185	225	410	190	230	420	5%	4%	2%	11%	51	137	235	
65	165	195	360	185	210	395	190	205	395	200	210	410	10%	0%	4%	12%	55	151	389	
67	190	220	410	195	230	425	240	240	480	245	260	505	4%	13%	5%	19%	54	151	403	
68	150	180	330	175	195	370	180	195	375	190	200	390	12%	1%	4%	15%	67	152	412	
69	175	160	335	180	165	345	175	160	335	175	150	325	3%	-3%	-3%	-3%	9	19	21	
70	170	210	380	180	215	395	170	210	380	175	200	375	4%	-4%	-1%	-1%	8	25	35	
71	200	150	350	220	160	380	230	160	390	250	160	410	9%	3%	5%	15%	32	152	406	
72	145	200	345	150	200	350	145	190	335	150	200	350	1%	-4%	4%	1%	15	47	120	
73	165	200	365	185	230	415	190	240	430	200	250	450	14%	4%	4%	19%	65	151	432	
74	195	215	410	200	220	420	210	220	430	210	220	430	2%	2%	0%	5%	25	147	298	
75	170	195	365	190	200	390	195	210	405	200	220	420	7%	4%	4%	13%	49	148	345	
76	200	205	405	230	250	480	235	260	495	235	255	490	19%	3%	-1%	17%	58	150	347	

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77	170	195	365	170	195	365	165	190	355	150	180	330	0%	-3%	-8%	-11%	3	4	4
78	180	210	390	200	220	420	205	230	435	205	230	435	8%	4%	0%	10%	78	150	401
79	145	190	335	165	220	385	165	230	395	170	230	400	15%	3%	1%	16%	57	152	398
80	170	155	325	195	170	365	200	180	380	210	190	400	12%	4%	5%	19%	69	152	410
82	180	125	305	195	140	335	190	150	340	190	170	360	10%	1%	6%	15%	63	150	437
83	185	200	385	200	220	420	195	215	410	195	215	410	9%	-2%	0%	6%	37	132	276
85	175	190	365	200	200	400	205	215	420	205	230	435	10%	5%	3%	16%	52	152	445
86	165	190	355	185	220	405	190	225	415	195	230	425	14%	2%	2%	16%	60	152	401
87	195	210	405	205	225	430	210	225	435	215	225	440	6%	1%	1%	8%	66	146	414
88	155	115	270	190	170	360	195	175	370	200	175	375	33%	3%	1%	28%	67	152	417
89	190	140	330	200	155	355	195	155	350	200	160	360	8%	-1%	3%	8%	68	151	478
90	150	180	330	165	190	355	175	190	365	180	190	370	8%	3%	1%	11%	54	152	333
91	155	180	335	170	210	380	175	210	385	170	200	370	13%	1%	-4%	9%	52	107	299
92	240	220	460	260	245	505	260	250	510	260	250	510	10%	1%	0%	10%	63	150	459
93	190	300	490	230	310	540	235	320	555	235	320	555	10%	3%	0%	12%	49	152	451
94	170	180	350	165	180	345	160	180	340	165	185	350	-1%	-1%	3%	0%	9	22	35
95	170	190	360	175	195	370	180	195	375	190	200	390	3%	1%	4%	8%	62	143	393
96	190	150	340	230	180	410	230	190	420	235	200	435	21%	2%	3%	22%	70	152	423
97	160	190	350	170	210	380	170	220	390	180	220	400	9%	3%	3%	13%	65	144	334
98	180	180	360	190	195	385	185	195	380	185	195	380	7%	-1%	0%	5%	28	67	124
100	170	155	325	205	160	365	200	170	370	205	170	375	12%	1%	1%	13%	66	152	320
101	150	150	300	175	180	355	185	190	375	190	190	380	18%	6%	1%	21%	64	148	420
102	180	160	340	200	180	380	200	190	390	210	205	415	12%	3%	6%	18%	55	150	370
103	165	200	365	180	210	390	180	215	395	185	210	395	7%	1%	0%	8%	64	152	208
104	160	200	360	180	220	400	180	220	400	190	225	415	11%	0%	4%	13%	45	152	318
105	180	160	340	200	190	390	205	195	400	210	220	430	15%	3%	7%	21%	65	152	422
Ave	175	184	359	192	199	391	195	204	399	200	209	409	9%	2%	2%	12%	44	127	273