

Welcome to ISAK!

Improving Speed and Accuracy in Keyboarding (ISAK) is a 60-lesson individualized skill-building system designed to provide students the level of keyboarding speed and accuracy they will need when applying for office and administrative positions. ISAK can be used in a stand-alone course or as part of another keyboarding course. The only requirement is a touch-keyboarding speed of at least 20 wpm.

ISAK features these innovations:

1. Web-based software
2. Filling the documented need for keyboarding speed
3. MAP+ (Misstroke Analysis and Prescription)
4. Separate practice for accuracy, technique, and speed
5. Flexibility in scheduling

Web-Based Software

Because there is no software to install, students (and instructors) can work from any computer that has an Internet connection. The software's intuitive interface is easy to understand and use. All exercises in the text are completed from within the ISAK software. The software keeps track of student progress and provides automatic scoring for all of the lesson exercises. When students open the software, it automatically opens where the student left off the last time. Students will continue to have access to the ISAK software even after their course ends—for additional skill development.

Filling the Documented Need for Keyboarding Speed

Even institutions that don't offer separate keyboarding courses recognize the need for students to increase their keyboarding speed and accuracy before they graduate, apply for a job, and are required to pass a typing speed test. A recent analysis of online job postings for administrative positions (posted at http://www.gdpkeyboarding.com/Word_Files/Required_Typing_Speeds.pdf) found the following:

1. The most common speed requirement (mode) was 60 wpm, accounting for 43 percent of the listings. The average speed requirement (mean) was 58 wpm. The middle speed requirement (median) was 60 wpm.
2. Job applicants who type at least 40 wpm would qualify for 10 percent of the positions that listed minimum typing speeds, those typing 50 wpm would qualify for 18 percent of the positions, and those typing 60 wpm would qualify for 80 percent of the positions.

The action-research report concluded by stating,

Regardless of their competence in word processing, students need high-level typing speeds (typically, at least 60 wpm) in order to even be hired for office positions. Achieving this level of speed requires extensive and systematic skillbuilding practice at every level of keyboarding instruction.

"Extensive and systematic skillbuilding practice" is exactly what ISAK is designed to provide!

MAP+ (Misstroke Analysis and Prescription)

MAP+ is a diagnostic component within the ISAK software that analyzes each student's pretest misstrokes and prescribes individualized remediation drills based on the student's misstrokes. Each time the student

accesses a drill, all new drill lines appear—thus providing *unlimited new drill lines* for 80 different kinds of keystroking problems.

ISAK provides separate practice for accuracy, technique, and speed improvement

It is a well-proven fact that students cannot work to improve speed and accuracy simultaneously. After an initial three-lesson keyboard review, each subsequent three-lesson unit in ISAK builds skill in these three areas in separate lessons.

First, every lesson begins with the goals for that lesson—so that students always know exactly what they’re trying to achieve in that lesson.

The goals are followed by a three-line Warmup. Line 1 contains all letters of the alphabet—to improve *accuracy*. Line 2 contains various types of drills—to improve *technique*. And Line 3 comprises a sentence made up of short, easy-to-type words—to improve *speed*.

Accuracy

4

LESSON

Goals

- Build accuracy on:
 - ✓ Corresponding-finger and confusable keys.
 - ✓ Spelling.
 - ✓ Horizontal, alphabetic, and number reaches.

A. WARMUP

Accuracy	1 John and I quietly picked up six razors from the woven bag.	12
Technique: Concentration	2 photoreconnaissance contemporaneousness extraterritoriality	24
Speed	3 If you go too deep and are not able to swim, call for help.	36
	1 2 3 4 5 6 7 8 9 10 11 12	

Accuracy Lessons

Lesson 1 of each unit provides systematic practice on these types of accuracy-improvement exercises:

1. **MAP+:** Each accuracy lesson provides one MAP+ exercise in improving keystroking accuracy on the alphabet keys and one MAP+ exercise on either the number or symbol keys—for individualized practice.

2. **Corresponding-Finger Practice:** Students often type a letter using the corresponding finger of the wrong hand. Therefore, ISAK provides practice in distinguishing between F and J reaches, D and K reaches, S and L reaches, and A and Sem reaches.

Note the Pre-test-Practice-Post-test (P/P/P) format of this drill. This routine was

developed by Dr. Fred Winger of Oregon State University, based upon his extensive body of keyboarding research. The Pretest comprises a 1-minute timed writing passage that is filled with examples of the

B. PRETEST-PRACTICE-POSTTEST: CORRESPONDING FINGERS
Take a 1-minute timed writing, pushing moderately for speed.

PRETEST	4 John and Ruby must name all of the nouns and verbs on	11
	5 the forms just to be sure they are correct. Mr. Hyde gave	23
	6 them five minutes to do the job, even though they did not	34
	7 need all of that time to finish it. Hooray for those two.	46
	1 2 3 4 5 6 7 8 9 10 11 12	
PRACTICE	8 tot vat but Jeff gate gulf goof debt Bob fate roof vote rig	
Corresponding Fingers	9 egg flag grab rub rug rob urge rot bare tear lift veer belt	
F Finger	10 frog robe tug bet fat Viv tree free verb vary vast tomb fog	
	11 tab glob rest rage gift bomb gut tube Bev brag big ebb gang	
J Finger	12 numb hub Ann shy hay mug fun from dun jay July bum nine hen	
	13 Jane Hyde June drum inn huge gnu Hugh menu jug jam name Jim	
	14 harm jut must urn hem Nan they mind joy hand hymn your envy	
	15 ugly may horn hut Fuji Josh man hug busy hour hum bush noun	
F and J Fingers	16 rightly rusty typify fought rupture granary glutton turmoil	
	17 buttery rusting gluten barley toughen faulty beauty borough	
	18 return thatch bygone bashful twangy bulging tankful foundry	
	19 throng tenth thermal gusting fraught bough Ruby thrash burn	
POSTTEST	Repeat the Pretest. <i>Goal:</i> Improve speed and accuracy.	

reach being practiced (in this case, words requiring extensive use of the F and J fingers—to help students distinguish between the two fingers. Finally, students take a Posttest to measure improvement.

3. Confusable Keys:

Research shows that three types of reaches cause confusions for typists. First, reaches using *consecutive fingers* are problematic—for example, typing *rt* or *tr*, both letters of which are typed with the same finger. So ISAK systematically provides exercises designed to eliminate these confusions. The other types of confusable reaches systematically practiced in ISAK are reaches using *adjacent fingers* (such as *oi* and *as*) and common *substitution errors* (such as typing *g* for *h*, and vice versa). All are practiced in ISAK.

PRACTICE

Consecutive Fingers

- 28 try trot trifle ort tramp apart art tract cart trial trudge
- 29 tragic trip wart triad trim divert truth unhurt troop train
- rt-tr* 30 dart true tried retort trowel skirt trick tree exhort shirt
- 31 resort quart tremor tray trance desert report oxcart travel
- mn-nm* 32 entertainment inmost unmask alumni firmness nonmetal unmade
- 33 hymnal gymnast alumna Denmark unmet column unmoving remnant
- 34 unmelted damned calmness columnist hymn abandonment chimney
- 35 autumnal detainment condemned circumnavigate unmade unmined
- vd-dv* 36 believe vagabond absolve obviated visibly invisible abusive
- 37 adverb removable overbite riverboat bevel abusive observant
- 38 combative vibrant livable bivouac overbuilt variable viably
- 39 bereave overblown riverbank vibes voluble behoove vestibule

4. Business

Spelling. Most instructors agree that competent spelling skills are a

critical component of competent keyboarding skill. Dr. Scot Ober’s published spelling research has identified vocabulary words that both (a) occur frequently in typical business writing and (b) are frequently misspelled by typical students. Words from his list of the 1,000 most frequently occurring and most frequently misspelled words in business writing are practiced in each accuracy lesson.

C. BUSINESS SPELLING

These spelling words are from a list of the most used and most misspelled words in business writing. Study the words that cause

- 20 accounted waiver equivalent obvious recommendation trustees
- 21 commensurate legislative treasurer’s appraisal consequently
- 22 remuneration deferred attributable inconvenience indication
- 23 unfortunately consultation regards opportunity installation

5. Reach Drills.

ISAK provides systematic practice on (a) horizontal reaches, which move to a different key on the same row, (b) vertical reaches, which move from one row to the adjacent row, and (c) jump reaches, which move from the upper row to the lower row, or vice versa.

F. REACH DRILLS: HORIZONTAL REACHES

Horizontal reaches move to a different key on the same row.

- er and lo* 40 amnio ionic goer leery jerk oiler legion polio arioso heron
- 41 motion era perky erg cheer period biotic mover violet jerky
- 42 here tiger rover refer twerp deer pier berth ere derby trio
- 43 liner saber brio ferry merge hers paper manioc ration dozer
- te and pu* 44 quote terabyte punt toted carte water steal taste pup doted
- 45 patented tester termite pulse bate oaten stem vote literate
- 45 tenor tempter tenet cited bite often emote feted tease Kate
- 46 terse put elite test tepee octet punk spurt testy jute pull

Technique Lessons

To achieve higher speeds and accuracy, students must practice good technique, so Lesson 2 of each unit builds proper technique, using these drills:

1. **Nonprinting**

Keys. Students often waste much time when reaching for the TAB, ENTER, SPACE BAR, LEFT SHIFT, RIGHT SHIFT, and BACK-SPACE keys. They either have to look down to find the keys or often then fail to return the finger immediately to home-row position. ISAK exercises are designed to remedy these weaknesses.

PRACTICE

Nonprinting Keys

ENTER Key

Press ENTER after each word to format each word on a new line.
 8 No! Repeat. Really? Fire! Tweet. Save. Attack. Wrong. Oops!
 9 Vote. Inhale. Drive. Oh. Here. Yeah. Proceed. Maybe. Pause.
 10 Evidently. Move. Talk. Back! Safe. Rest. Stand. How? Right.
 11 Danger! Catch. Drink. Probably. Where. Hi. Hello. Possibly.

TAB Key

Type each word; then press TAB to move from column to column.

12 zeros quack atlas afraid
 13 aquatic apart academy animal
 14 quint quarry applaud quotable
 15 zigzag quiche sanier affair

SPACE BAR

Bounce the thumb quickly off the SPACE BAR.

16 Is it too big? I dare you. See me at ten. I am up. Who, me?
 17 Why me? Hi. Why not? Help me. She may do it. Go. Stop here.
 18 Oh. Me? So? Go slow. Al came and went. It is up to me. How?
 19 Jo is up. Do not. How dare you? I can fax it. It is a fact.

2. **Concentration.**

When students don't concentrate, they lose their place in the copy, have to look at the keyboard to find the keys, or make other time-wasting motions. ISAK provides three types of concentration drills: (a) vocabulary words, (b) foreign phrases, and (c) sentences typed from right to left. All are designed to force students to keep their eyes on the copy.

PRACTICE

Vocabulary Words

Short Words

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12
 32 evoke invert vale elegy rue pious guise
 33 kiln aver vista lien rondo bevel docile
 34 staid addle solace twinge impute egress
 35 synod oust augur salvo edible onus ante

Medium-Length Words

36 aggrieve obelisk sidereal athwart bulbous insipid
 37 sibilance invective messieurs philately deciduous
 38 itinerant pseudonym voracious bumptious fulminate
 39 obtrude anathema prosaic insular sedulous duteous

Long Words

40 disagreements macadamize impetuosity rapscallion declension
 41 licentious functionary inexorable paleontology remuneration
 42 laboratories graphically individualistically recapitulation
 43 punctilious generalisation electromechanical revitalisation

Speed Lessons

Lesson 3 of each unit is designed to build student speed at the keyboard by using these drills.

1. **15-Second Speed Sprints.**

Students enjoy these short bursts of speed because they are motivational and

show students just how fast their fingers are capable of moving. They are also an excellent vehicle for helping students break the habit of looking at their hands when they type. Tell your students, "You may not be able to go for an entire minute without looking at your hands, but I'll bet you can do it for just 15 seconds."

C. 15-SECOND SPEED SPRINTS

Goal: Increase your speed on each retyping of the same sentence.

- 20 Soon this snow will melt; then we will find what lies here.
- 21 Save some now so that you may spend it a few days from now.
- 22 The sea was cold, but she was too keen to surf to stay out.
- 23 When we meet, I will ask you to read the mail they sent us.

2. Common Letter Combinations.

Dr. Scot Ober's published research has identified the most frequently occurring 2-letter, 3-letter, and 4-letter combinations in typical business writing. If students

learn to type these frequent combinations quickly (as a "word" as opposed to letter-by-letter typing), their speed will increase.

PRACTICE Common Letter Combinations

8 oink din in sink dink gaining minting nine singing tainting
 9 evincing insulin dint inkiness pining dinging lint clinking
in 10 invading pinning injuring tinting finding swinging refining
 11 ruin bringing spin jingling line pointing Einstein infringe
ent 12 century figment stent sentry enticed entree entreat evident
 13 talent menthol lament tenthly aplenty segment tenth raiment
 14 went dental orient potent renter enter nascent augment tent
 15 lucent entrap entries serpent ascent intent present opulent
tion 16 reduction section adoration auction nation motion education
 17 ruination auctioned excretion deception indentation avocation
 18 reception cessation gestation pollution lactation condition
 19 attrition dentition accretion bisection depiction carnation

3. **Progressive Practice.** Progressive Practice is an individualized skillbuilding component of ISAK that is designed to build speed and accuracy in short, incremental steps. Thirty-second passages are provided for speeds ranging from 20 wpm to 100 wpm. The ISAK software automatically displays the correct passage for each student. The student practices that passage until he or she can complete it with no uncorrected errors and then moves to the next passage, which is 2 wpm faster. The topics of both the Progressive Practice and Paced Practice relate to grammar and mechanics.

4. **Paced Practice.** Paced Practice is an individualized skillbuilding component designed to build speed by enabling students to speed up—just a little—and then to build accuracy by slowing down—just a little; any gross deviation from normal typing speed is detrimental to skillbuilding. The ISAK software indicates at what point in the timed writing students should be at each 15-second interval. If they're typing too fast, they should slow down a little; if they're typing too slowly, they should speed up a little. Their goal for each timed writing is to be within a character or two of each speed marker when it disappears.

As soon as a student reaches his or her own individualized speed goal, ISAK displays a passage that is 2 wpm slower than the speed goal, and then the student works for accuracy—by slowing down *just a little*.

5. **5-Minute Timed Writing.** Each speed lesson ends with a 5-minute timed writing. All timed writings contain all letters of the alphabet and are the same length, the same level of difficulty (as measured by syllabic intensity), and the same format—to ensure that student differences in speed or accuracy are the result of increased *skill* and not the result of changes in copy difficulty or format. The 40 Supplementary Timed Writings in the Appendix are written to the same standards as the lesson timed writings.

Systematic Skillbuilding

As can be seen from the table on page X, all of the above drills are practiced systematically throughout the 60 lessons, because each type of drill builds skill in a slightly different manner. Thus, ISAK is a skillbuilding *system*.

Flexibility in Scheduling

No matter what your course length is, students should complete Lessons 1-3, which comprise a complete keyboard review. Most students need this review in order to be successful in subsequent lessons.

As noted, each unit comprises one accuracy lesson, one technique lesson, and one speed lesson. Lessons 4-60 can be used in any order you think most effective for your students. In other words, one lesson does not depend upon a previous lesson.

In a shorter course, you may opt to have students type each drill 1 time. In a longer course, you may opt to have your students type each exercise 2 or even 3 times. If you do this, remember that having a student type each line two times before moving to the next line promotes speed; having a student type the entire four lines of a drill 1 time and then typing the four lines a second time promotes accuracy. Or, you may opt to have students type all 60 lessons, and then starting over, type all 60 lessons a second time. The choice is yours.

ISAK: A Skillbuilding System

ACCURACY IMPROVEMENT																			
Lesson No.	4	7	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58
WARMUPS																			
1. MAP+:																			
Alphabet																			
Number																			
Symbol																			
2. Corresponding Fingers (P/P/P):																			
F J F and J																			
D K D and K																			
S L S and L																			
A ; A and ;																			
3. Confusable Keys (P/P/P):																			
Consecutive Fingers:																			
rt-tr mn-nm vb-bv																			
de-ed ol-lo fr-rf																			
Adjacent Fingers:																			
oi-io as-sa sd-ds																			
re-er iu-ui we-ew																			
Substitutions:																			
e-i g-h a-e																			
s-k v-t r-u																			
4. Business Spelling:																			
Most Frequently Used and Misspelled Business Vocabulary																			
5. Reach Drills:																			
Horizontal Reaches																			
Vertical Reaches																			
Jump Reaches																			
TECHNIQUE IMPROVEMENT																			
Lesson No.	5	8	11	14	17	20	23	26	29	32	35	38	41	44	47	50	53	56	59
WARMUPS																			
1. Nonprinting Keys (P/P/P):																			
TAB ENTER SPACE BAR																			
LEFT SHIFT RIGHT SHIFT BACKSPACE KEY																			
2. Concentration (P/P/P):																			
Vocabulary Words																			
Foreign Phrases																			
Reverse Typing																			
3. Number Practice:																			
40 three-digit numbers																			
4. Symbol Practice:																			
All top-row symbols																			
5. Punctuation:																			
All punctuation marks																			
SPEED IMPROVEMENT																			
Lesson No.	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
WARMUPS																			
1. 15-Second Speed Sprints																			
2. Common Letter Combinations (P/P/P):																			
in ent tion																			
er ing ment																			
re ati able																			
ti pro ther																			
on ate comp																			
es con ance																			
3. Special Hand Drills:																			
Left-Hand Words Right-Hand Words Left- & Right-Hand Words																			
Alternate-Hand Words Double Letters Keyboard-Row Words																			
4. Progressive Practice																			
5. Paced Practice																			
6. 5-Minute Timed Writings																			

A Note About Homework

Students should be able to touch-keyboard at the rate of at least 20 wpm before beginning ISAK. Individualized drills are provided for speeds ranging from 20 wpm to 100 wpm. Each lesson has been developed to require students who type 20 wpm an average of 50 minutes to complete. Using the standard practice of counting 50 minutes of class time as 1 hour (thus allowing for a 10-minute break), these students would typically take 60 hours to type all drills one time in all 60 lessons. You can use this information to determine the amount of homework to assign to fulfill your institution's expectations for homework.

To the Student

Improving Speed and Accuracy in Keyboarding (ISAK) has one purpose: to help you achieve the speed and accuracy skills in keyboarding that will enable you to secure the type of employment position for which you are trained. It is designed to upgrade your keyboarding skills through scientific copy, proven techniques, and individualized practice. You will always be competing against your own previous best effort—not against the class or some arbitrarily set goals.

The drills in this text have been developed based on extensive research regarding how typists learn, what reaches cause them the most problems, and how to remediate those problems so that you become an expert typist. If you complete these drills and follow the practice techniques included, you should see a noticeable improvement in your skill level.

All of your work will be completed through the ISAK software, which is an online program available for use at any computer that has Internet access. The software will either display the copy for you to type or will direct you to the appropriate lesson and page number in the text. Through the software, you will always be able to see which lesson sections you have completed and how you performed on them.

Typing Technique

Position yourself correctly at the keyboard to achieve the best typing results, reduce fatigue, and avoid health problems. Follow these steps:

- Make sure the surface of the monitor is clean. Position the monitor directly in front of you to minimize twisting of the neck, about an arm's length away, and tilt the top of the monitor back a little.
- Use “dynamic seating”—that is, don't sit in the same position for long periods of time.
- Sit slightly reclined (greater than 90 degrees) in the chair, with the lower back against the backrest and your feet flat on the floor. Center your body in front of the keyboard, with the text on one side and the mouse on the other, both at the same level as the desk.
- Raise your hands slightly when typing so that your wrists do not touch the keyboard. There should be a straight line between your lower arms, wrists, and back of the hands (this is called the *neutral* position of the wrist).
- Curve your fingers naturally, with the finger tips lightly touching the home-row keys. Make quick, light strokes, operating all keys by touch and using the correct fingering.

Tension-Reducing Exercises

- Hold your shoulders with your palms and rotate your elbows ten times clockwise, then ten times counterclockwise.
- Keeping your head stationary, rotate your eyes to form a circle, both eyes focusing together, five times clockwise and five times counterclockwise.
- Let your hands hang loosely at your side; rotate your right hand clockwise in a circle, then counterclockwise. Repeat with the left hand.
- Lock your hands behind your head, bring elbows back as far as possible, inhale deeply and hold for 20 seconds. Exhale and relax.
- Roll your shoulders forward in a big circle; then roll them backward in a big circle—the larger the circle, the better.
- Shut your eyes tightly for 3 seconds; then open them wide, blinking rapidly; doing so produces tears that moisten and lubricate the eyes.

- Sitting back, raise your right foot slightly and rotate it clockwise in a big circle, then counterclockwise. Repeat with the left foot.
- Standing at attention, breathe in while you bend backward and then breathe out as you return to the normal position. Then repeat, bending forward.
- Tilt your neck to one side (ear toward shoulder), hold for 10 seconds, relax, then tilt your neck to the other side and repeat. Using the same steps, tilt your neck forward and backward.
- While in a relaxed position, place one hand on the abdomen and the other hand on the chest; inhale slowly through the nose and hold for 4 seconds; exhale slowly through the mouth.
- With eyes closed, slowly move the eyes up to the ceiling, down to the floor, to the left, and then to the right.
- With your elbows on the desk and leaning forward, cup your hands over your eyes, close your eyes, and inhale deeply through the nose; hold for 4 seconds, and then exhale through the mouth.

Entrance and Exit Timed Writing

Begin your study by taking the following timed writing so that ISAK can chart your beginning performance. At the end of the course (or at any point during the course), take the same timed writing and note your skill gains.

1	If you don't remember the location of a key when you	11
2	are typing, first look at your keyboard to find it, but	22
3	then look back at your copy before you strike the key, and	34
4	say the letter abruptly to yourself while striking the key.	46
5	Doing this will help fix the key's location in your memory.	58
6	Initially, you may be able to type a little faster	68
7	when looking at your fingers. But take the longer view:	79
8	Looking at your fingers frequently will prevent you from	91
9	reaching your speed potential, because it takes time away	102
10	from typing and also increases your errors since you lose	114
11	your place in the text and tend to either repeat or omit	125
12	words, thus decreasing your accuracy.	133
13	Only you can break yourself of this habit. No person	144
14	is looking over your shoulder. But making the effort to	155
15	break this habit will surely pay dividends in this course	167
16	and in the future, when you realize just how many hours you	179
17	will spend daily in front of a keyboard. I'm confident you	191
18	can do it if you set this as an important goal.	200