The University Research
Behind
INTERNATIONAL
VOCABULARY
ESPERANTO
by Professor
Wesley E Arnold

The University Research Behind INTERNATIONAL VOCABULARY QUICK

International

understanding in

much less time using

international words

Esperanto

The University Research Behind INTERNATIONAL VOCABULARY Esperanto QUICK INTERNATIONAL UNDERSTANDING IN MUCH LESS TIME USING INTERNATIONAL WORDS,

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This book may now be copied for Educational use by everyone for all purposes. It is now free to all because it is needed because thousends of people have died or suffered because of language misunderstandings.

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INTERNATIONAL VOCABULARY

Most cost efficient solution to communication between languages.

Most **time** efficient solution to communication between over 1000 languages.

Most of the necessary grammar can be learned in a few days and has no exceptions.

Some groups can be communicating directly in a month.

All words spelled as pronounced.

All verbs are regular. There are no idioms.

Scientifically planned for inter-language communication the vocabulary for 80-90 percent understanding can be learned in as little as a month. 300-999 international word roots provide 80-99 percent understanding without years of memorization. A free dictionary provides for any additional words and **eliminates years of study**. ¹

Does not replace anyone's language!

Companies can save thousands of dollars in training costs.

Helps people learn English.

SAMPLE. La inteligenta persono lernas. Internacia lingvo estas la moderna, kultura lingvo por la tuta mondo. Simpla, fleksebla, ghi estas la praktika solvo de la problemo de internacia interkompreno & meritas vian konsideron. (The intelligent person learns. International language is the modern, cultural language for the whole world. Simple, flexible, it is the practical solution of the problem of inter-national mutual understanding & merits your consideration.) For now sound out all text as if it were in English. Punctuation is on page 43, 44.

¹ See references to scientific studies Thorndyke, Arnold, et al page 43.

International Vocabulary is a scientifically designed and proven vocabulary that enables speakers of different languages to

successfully communicate in a minimum of time and with a minimum of cost.

It is easy to learn because it contains international words common to many languages. People already recognize a large percentage of these word roots. This vocabulary is over 50 percent English. ¹

Because this vocabulary builds words by combination and by adding prefixes and suffixes, thousands of words can be created without having to memorize them in advance.

Scientific studies show that a basic vocabulary of about 850 word roots is equal to over 6000 English words and easily forms over 50,000 practical meanings, providing 85-99% understanding. This cannot be done with English, as English requires over 6000 words to cover 90% understanding because of its irregular word formation and ambiguity. ⁱⁱ

English has over 8,000 idioms and thousands of irregularities and exceptions. iii

The grammar rules have no exceptions. All words are spelled as pronounced and pronounced as spelled. All verbs are regular. There are no exceptions or irregularities to spend years learning and no idioms. iv

Feel free to check out any and all of the statements in this document. A scientific research bibliography is available.

This is not meant to replace any language rather it is:

The quickest way to interlanguage communication between speakers of different languages without resorting to expensive and mistake prone translators and WITHOUT SPENDING THE MANY YEARS IT TAKES TO LEARN ENGLISH OR OTHER LANGUAGES.

Companies can save thousands of dollars in translating and/or training costs by using a basic international vocabulary based on high utility words (50% English). Example: A company needs to use several workers on a project who do not understand each other's languages. Rather than spending several years to learn each other's language or hire expensive translators, better to send them, in advance learning materials for international vocabulary. Then get them together for a few weeks to practice using it together, using a teacher. This group could be up and communicating directly with each other in a month. ^v

This offers THE MOST TIME EFFICIENT AND COST EFFICIENT SOLUTION to the problem of communication between languages. Business can be conducted directly and privately without expensive translators.

Most people do not have time to learn other languages and most <u>non-English</u> speakers do not have the years it takes to learn English. (No matter how much we want them to)

But International Vocabulary can be learned according to scientific tests in one quarter the time as any other language. $^{\rm vi}$

We could save millions of dollars a year

if the UN was told to use International Vocabulary instead of that expensive translation into six languages. (Nearly all of that translation goes into the trash within a few weeks.) Millions of dollars are wasted on translation to multiple languages. Everyone wants speeches to be translated and printed into their languages and they want us to pay for it.

Every human should be able to communicate with every other human especially in emergencies. Humans need to understand each other. This vocabulary makes possible for humans to be able to understand each other without years of study.

Currently it is being used in over 90 countries and has over two million speakers worldwide. Many have email addresses and are willing to help. It has been fully tested and used by professionals, and individuals with success. There are several worldwide publications using it. Books and international magazines are available in many countries.

WHY IT IS NOT MEANT TO REPLACE OTHER LANGUAGES

This inter-language vocabulary is for use between speakers of different languages. People who have a common native language such as English should go on using it. Learning this vocabulary helps one learn words from many languages. International Vocabulary should be learned by those who might have to communicate with someone who does not understand English. If some people in each community did this around the world this would open up a communication channel all around the world and the terrible language problem would be solved.

HOW TO LEARN IT.

Translations and tapes of this international vocabulary, which is also known as Esperanto, are available in many languages. There are also online self-tutors see the web site http://www.ios.cs.-utwente.nl/esperanto/hypercourse/...also see www.esperanto.net

For more info see http://www.esperanto.net/veb/faq.html.

Also a nice series of sheets called Esperanto quick learning sheets which can be folded and carried in the pocket for learning on the go are available free with a large self addressed stamped envelope or for cost and postage from wesleyarnold@yahoo.com

Here is just a peek at the SELF TUTOR

Welcome! This vocabulary is the easiest of all to learn and you will learn many words from many languages. But to be fluent you will still have to practice at least a few minutes daily. The following pages provide instruction in the most important words first. Use blank file cards to jot down phrases and words you particularly want to remember. While one is waiting for the elevator, or in line, in the bathroom, or on hold there exists a few moments one could use to advantage to learn a new word or phrase. There may be many of these learning moments one can squeeze into a day. Learning tapes and aids are available. Actively listening to tapes while driving, riding, walking or jogging is an even greater way of learning. The more one thinks and speaks the faster one will master it. To practice and learn with others in a cafe or on the go is a fun way to learn.

If you don't believe the time claims in the above try lesson 1. It claims that you can learn the entire endings for every verb in the language for present past and future in about 3 minutes. Can you do that with any other language?

Lesson 1 (About 3 minutes) ALL VERBS ARE ABSOLUTELY REGULAR! NO EXCEPTIONS!

All verbs end in "as" in the PRESENT TENSE.

Ken helpas Lisa. Ken helps Lisa

Mi havas I have

Vi telefonas. You telephone.

Shi korespondas. She corresponds.

To form the PAST TENSE just add "is". This works for all verbs in the language.

Ken help**is** Ken helped.

Mi havis. I had

Vi telefonis. You telephoned.

Shi korespondis. She corresponded.

To form the FUTURE TENSE add, "os". Works for all verbs in the language.

Ken helpos Ken will help.

Mi havos I shall have

Vi telefonos You will telephone.

Shi korespondos. She will correspond.

End of lesson 1.

You have just learned **all** of the endings for <u>every</u> verb in the entire language for present past and future in about 3 minutes.

You cannot do that with any other language. In all other languages you must learn hundreds of verb forms and sometimes many irregular endings. And did you notice that the international vocabulary was so much like English that you hardly needed translation.

Lesson 2 (about three minutes)

You will see all of the singular endings of every noun, adjective and adverb in the entire language. And all of the forms of the word **the**. (There is only one.)

ALL NOUNS END IN \mathbf{O} . Example HELP \mathbf{O} help Only one ending. Works for every noun in the language.

ALL ADJECTIVES END IN A. HELPA helping Same as above.

ALL ADVERBS END IN E. HELPE helpfully

La telefono The telephone That's it only one form no changes.

Genders to memorize. None.

Idioms to memorize. None

That's it. Those are the singular endings of every noun, adjective and adverb in entire language. One also cannot do that in any other language. Many languages make you learn many many different forms which take hundreds of hours of study and practice to master.

End Lesson 2

Lesson 3

Internationality, Spelling, and Pronunciation (about 2 minutes)

This vocabulary is much easier to learn because it is more like English than any other language. The English speaker will be able to recognize thousands of words. Most words in this vocabulary are international words. Some were created to be clear and unique to aid in understanding. Over half are recognizable by English speakers. French, German and Spanish speakers can also recognize about half. This language is much easier to learn even for Chinese whose words are not similar. All words are spelled as pronounced and pronounced as spelled. No exceptions. The sounds were planned to be clear sounding. Each letter has only one sound. Pure vowels are used. The table of pronunciation and the alphabet has been placed at the end of this document for quick reference.

End Lesson 3

Lesson 4 Wordbuilding, Opposites

Thousands of meanings are easily created by simple word building and using affixes. This means that thousands of words and meanings can be created as needed without having to memorize new words. This saves thousands of hours of study time.

An affix is either a prefix or suffix. Examples are below:

The prefix <u>mal</u> when placed in front of any word changes it to the opposite meaning. Just learning this one prefix saves you from having to learn hundreds of words.

All adjectives end in -A.

BONA good

MALbona bad

GRANDA big MALGRANDA small

NOVA new JUNA young MALJUNA old

LA JUNA VIRO the young man

LONGA long MALLONGA short
ANTAUhA front MALANTAUhA behind

ALTA high MALALTA low
MULTA many MALMULTA few
SIMILA similar MALSIMILA unsimilar

End of lesson 4. No other language offers the above time and money saving features.

Lesson 5 More easy wordbuilding (about 3 minutes)

re can be added to any verb to form new meaning

help rehelp helpas rehelpas

<u>ist</u> means professional person as dentist dent<u>ist</u>o

<u>in</u> means feminine and can be added to any word that makes sense dentist<u>in</u>o a female dentist <u>et</u> means smaller like English majorette little glass glas<u>et</u>o

rivereto small river

eg means big or bigger big glass glasego

big river riverego

These suffixes work with any word in the entire language in which it makes sense. Thousands of meanings can be created without prior memorization saving thousands of hours of study time, And cost, as time is money. Sometimes time is more valuable than money.

End of Lesson 5

Lesson 6. All of the common personal pronouns have only one form each. (About 3 minutes)

mi ESTAS I am vi ESTAS you are li ESTAS he is

ni ESTAS we are ili ESTAS they are shi ESTAS she is (shi is pronounced like she)

ghi ESTAS it is (ghi is like jee in jeep) Ghi estas tomato.

End of lesson 6. Only seven personal pronouns with only one form each. You can't do that in most other languages.

Lesson 7. More words. (About 3 minutes)

SALUTON Hello. BONAN TAGON Good day.

BONAN MATENON. Good morning. -NOKTON night -VESPERON evening

GhI ESTAS ALTA It is tall Ghi estas malalta It is short shi estas bona. She is good. Li estas malbona. He is bad.

Helpo estas bona. Malhelpo estas malbona.

Helpo kaj (and)

scio (knowledge) estas bona por ni. (for us)

Li kaj shi estas ili. (they or them)

Li estas viro. (man) Shi estas virino. (woman) Ili estas personoj. (persons)

Ghi estas objekto. (object) Telefono estas objekto.

End Lesson 7.

Lesson 8 just more words.

Kio estas tio? (What is that?) Tio estas telefono.

Libro (book) estas objekto. La telefono estas sur (on) la tablo. (table) La kato estas sub la tablo. (cat is under the table)

Poli estas birdo. (is a bird) Rover estas hundo. (is a dog)

La fisho estas en la akvo. The fish is in the water.

La libro estas sur la tablo. La telefono kaj la libro estas objektoj. (objects) La glaso de akvo The glass of water

Ken kaj Maria estas personoj. Ken estas la patro de (father of) Kori kaj Lisa. La piano de Maria estas negra. (is black)

Maria estas la patrino de (mother of) Lisa. Kori estas nur (only) ses.(six) Kori estas knabo. (boy) Li estas knabo.

Lisa estas knabino. (girl) Shi estas knabino. Lisa estas sep. (seven)

The suffix -IN makes any word feminine.

VIRO man VIRINO woman PATRO father PATRINO mother

KNABO boy KNABINO girl

PATRO KAJ PATRINO father and mother

Patro, patrino, knabino kaj (aj is pronounced as ky in sky.) knabo estas familio.

End of lesson 8.

Lesson 9. Plurals are all the same and are clear. No exceptions.

Many plurals in many languages are irregular. No so here. The "s" sound of English is often not heard in noisy rooms or over radio transmissions so a clearer sound was needed. That sound in this language is pronounced like the oy in boy.

Plurals are formed by adding J. OJ is pronounced as oy in toy.

1 tomato 2 tomatoj 1 glaso 3 glasoj 1 piano 2 pianoj

BIRDO bird BIRDOJ birds KATO cat KATOJ cats TELEFONO telephone TELEFONOJ phones TABLO table TABLOJ tables telephonoj kaj paperoj telephones and papers Kato estas BESTO (beast, animal) Birdo estas besto.

Sed ankauh (but also) estas la birdo kaj la kato en (in) la familio.

Jes (yes) sed (but) la personoj ne estas (are not) bestoj.

Unu du tri kvar kvin ses. (123456)

familio kun (with) kvar personoj. four persons

Kvar personoj kaj du bestoj en la familio. Four persons and two animals in the family. La personoj ne estas bestoj kaj la bestoj ne estas personoj. The persons are not animals and the animals are not persons. End of Lesson 9.

Why is Esperanto not well known already?

It is still largely unknown even to many language experts and teachers because there is no large and powerful group to promote it as most governments and ethnic groups are promoting their own languages. There is tremendous chauvinism and bias and even psychological resistance to learning a language other than one's own native language. Many teachers are afraid that if students find out about how easy it is to learn it will cut down on the demand for languages they teach and they could lose their jobs. Many governments, leaders, groups and people in power stand to gain by putting this language vocabulary down and spread false information about it. For example they say that it is an artificial fad that is not practical. Not true. It has been used refined, tested, and used for over 100 years. Is that a fad? Artificial of course all languages are artificial but this one was scientifically planned to be used between speakers of different languages and does this job with more efficiency than any other language. It is artificial just like a car is an artificial horse. It seems to be practical to those of us who cannot understand many people who allegedly speak English, who even after years of study cannot understand a normal conversation in English but can do so with international vocabulary within a few months. It seems very practical to email ahead in a foreign land and be met by someone who I can understand and who knows the native language, customs, things to see and to avoid. It seems practical to be able to meet in a convention where people from 50-90 countries can all understand each other without paying for or need of a single interpreter. It seems practical to be able to do business with people from several countries without having to wait years for them to learn English.

Fluency can occur in a fraction of the time of English because it does not suffer the drawbacks of English. (the worst spelling & pronunciation and the most massive ambiguous vocabulary of all languages with over 8,000 idioms^{vii}) As a second language English is very difficult for the average person to learn. The average person takes well over five years to write English well. In IV every letter has only one simple sound and all words are phonetically spelled--no exceptions. There are no difficult sounds to pronounce. The vocabulary is well developed and concise with few ambiguities or idioms. Research shows that the first 200 words replace over 4000 verbs. viiiResearch also shows that the vocabulary and grammar do the work of over 20,000 words. ixThis is possible because of the large number of synonyms in languages. Over 30 common affixes can be used alone or will work with most words to form thousands of additional meanings without having to learn any new words. IV successfully ends language discrimination by putting all speakers on a neutral and equal footing. Speakers are not forced to learn someone else's national language.

The vocabulary of IV is based on research and designed to provide maximum understanding in a minimum of time. It does this by eliminating thousands of needless memorizations required by all other languages such as: thousands of genders, irregular endings, irregular verbs, inflections, duplicate words, irregular grammar rules, irregular pronunciations, irregular spellings, irregular accents, idioms, and thousands of exceptions.

This inter-language vocabulary is based on, and is identical to the most modern and efficient language in the world. (Yes there is scientific documentation on this. *) This is an international language called "Lingvo Internacia" also known as Esperanto. Although virtually unknown in the United States, it has millions of speakers in over 90 countries. *i This scientifically planned language has thousands of international words and is very complete fully suitable for use by professionals. (It is not Spanish). Each year thousands of people from 40-80 countries attend meetings held around the world and use it in traveling, and business. With speakers in over 90 countries the possibilities are rich for international contacts and pen pals. IV turns many students on to languages. Many become motivated to go on to learn other languages.

Every human being should be able to communicate with every other human on this planet but most cannot because of the tremendous language barriers of over 1000 languages in the world. With International Vocabulary (IV) everyone wins. Everyone can still speak their own native language while being able to communicate using international words.

The inter-language vocabulary makes inter-language communication easily possible in a short time to all humans. More people can learn it because it makes much less demand on time for memorization. It is not meant to replace any language rather studies show that once IV is learned it facilitates learning other languages. This inter-language vocabulary provides the opportunity, and most time-efficient potential way for every human to be able to communicate with every other human on this planet.

GRAMMAR SUMMARY

MOST NECESSARY GRAMMAR, Can be learned in a few hours or days depending on the person and time spent.

Just 16 basic rules. The rest is vocabulary.

The rules of grammar below have no exceptions.

The definite article 'la' remains same for all cases, sexes and numbers. No indefinite article is needed. No genders to learn.

All words are pronounced as spelled. No exceptions.

Accent is always on the next to last syllable.

All adjectives end with a, number & case same as with nouns. flora [floral] helpa [helping] No exceptions.

Adverbs end in e, have same comparison as adjectives. helpe [helping] No exceptions. The basic numerals do not vary for case. Tens and hundreds are formed by junction of numerals.

Ordinals are formed by addition of a. (3rd = tria) All a matter of simple vocabulary.

All nouns end in o, 'tomato' j forms all plurals 'tomatoj' pronounced like the oy in boy.

This is much clearer than the s sound over distance or noise. No exceptions.

Possessives formed by adding a; no change with sex or number. mia [mine]

Verbs do not change with person or number; are formed by adding: **as** present, **is** past, **os** future, helpas [helps] helpis [helped] helpos [will help] All verbs are regular. No exceptions.

Simple junction forms compound words, chief word at end. birdnesto [birdnest] New words which majority of languages have taken from one source undergo no change except to conform to simple efficient spelling. Most of the vocabulary is made up of international words.

The rest is mostly a matter of vocabulary or seeing an example of wording.

There have been several scientific studies done. For example famed educational psychologist Edward Thorndike verified the ease of learning. xii **Scientific references** are listed in the book In late 1995 an analysis was done on the 1000 most frequently used English words on the internet. The 1000 words came from 343,945,617 total words by Rick Walker from one year of internet Usenet newsgroup messages. The analysis showed that only 397 International Vocabulary morphemes were required to form the 783 most used English words. The remaining items were: proper nouns such as names of persons; letters of the alphabet, parts of addresses, technical abbreviations or duplicate words. xiii

The analysis shows that this vocabulary only requires about one half of the number of words to be memorized than English for the most common 1000 English words. This analysis agreed with one done on the 1000 most common words based on the 5 million word American Heritage Dictionary Corpus.xiv Anyone may easily verify the correctness of this analysis. This shows that this basic International Vocabulary is most suited for internet usage.

Research also shows that IV requires only about one quarter the number of words to be memorized in total. **What all that adds up to is that this vocabulary can enable persons to communicate directly between languages in significantly less time and with significantly less cost.

By using simple prefixes and suffixes thousands of words can be formed with specific meanings that are quite useable and concise if and when that particular word is needed all without having to memorize that word in advance. 850 basic roots can form over 50,000 practical meanings.

With International Vocabulary one can often say in one word what takes several words to say in English.

IV can be found in international news groups such as: soc.culture.esperanto and alt.uu.lang.esperanto.misc.

WHERE TO GET MORE INFORMATION see http://www.esperanto.net/
In the United States of America the national club is ELNA see http://www.esperanto-usa.org/
On the internet use Google.com to search for the word Esperanto. There are hundreds of pages of free literature.

Free Dictionaries and learning aids. see http://ttt.esperanto.org/us/USEJ/world/learning.html Esperanto Online Class learn at your own pace.

see http://wwwtios.cs.utwente.nl/esperanto/hypercourse/

A reply to some arguments against Esperanto http://ttt.esperanto.org/us/USEJ/world/kontraux.html

The alphabet consists of the following letters: Each has only one sound. Aa, Bb, Cc, C^c^, Dd, Ee, Ff, Gg, G^g^, Hh, H^h^, Ii, J^, j^, Kk, Ll, Mm, Nn, Oo, Pp, Rr, Ss, S^ s^ Tt, Uu, U^u^, Vv, Zz. There is no Q W X or Y. There are six letters that wear a hat (alternatively they may have an "h" placed after them to indicate precisely the sound of that letter) This is like the hard g pronounced as in get verses the soft g written with a \(^\) over it or an h after it pronounced as in gem. The consonants are pronounced by adding an "o" to the letter. B is pronounced Bo. The vowels are pronounced by saying their sound. Since each letter has only one sound the simplest way to note the difference internationally is to mark that letter. In this way the pronunciation is precise and always matches the spelling. This also allows many more international words to be used. In general the letters are pronounced as in English except for these BELOW. Each letter has only one sound. a like the a in father e like the e in get i like the i in machine o like the o in note u like the oo in food aj like the y in my auh like the ou in out ej like the ay in stay euh like the o in who oi like the ov in boy uj like the ui in ruin c like the ts sound of ts ch like the ch in chew g like the g in go gh like the g in gem hh like the ch in Loch Ness i like the v in ves jh like the s in pleasure s like the s in set sh like the sh in ship uh like the w in now

For AEIOU say "Pa, let me go too."

For more info see http://www.esperanto.net/veb/fag.html

Research Section

It appears that important Esperanto research, although published in some scholarly journal, often lies on the shelf virtually unknown to those who could use the information to promote Esperanto. This book gathers much of the most important research and provides a path to locate more information. Also as pointed out by Doctors Alvino Fantini and Timothy Reagan in "Esperanto and Education: Toward a Research Agenda", "Much of the literature concerned with reporting studies on the teaching and learning of Esperanto is available only in Esperanto, thus making the research literature inaccessible to many potential, but non-Esperanto speaking, supporters" (33)

WHY IS ESPERANTO NEEDED?

Humans have a need to understand each other. Many people have died or suffered because of language misunderstandings. There are over 1000 active languages today not counting dialects. The truth is that most humans cannot understand most other humans on this planet. Most important is that Esperanto has the potential to help prevent loss of life and also help prevent human suffering around the world.

Each human being needs to be able to understand other human beings. There are times when ones life depends on it. Examples: There have been and will continue to be lives lost due to pilots not understanding important commun ications. In several countries pilots do not know English and are discouraged from learning it because of political and religious considerations; A homeowner's wife and victim of vandalism was startled by a noise outside in the dark. She yelled for her husband in another room to get the gun. The homeowner opened the door and saw a man running at him with a black object in his hand that looked like a gun. He ordered the man running toward him to "freeze." The intruder continued to charge and was then shot. He did not know what "freeze" meant as he was a Japanese foreign exchange student: Police in our cities and soldiers in many foreign lands must make split-second decisions. Put yourself in their place. You catch sight of a person with what appears to be a gun in his hand. You tell him to put his hands up. Instead the person begins to point the object at you. One more warning to drop it, but he doesn't. Your life is on the line, you must either shoot or perhaps be killed yourself. There is no time to ponder. Soldiers are trained to shoot. If there is a language difference someone may die. Unfortunately today around the world many people are injured because they do not understand someone else's language. There is no time in these situations for interpreters. Language knowledge becomes a life or death matter.

What if you were a tourist and a foreign policeman said freeze in some language you did not understand. Imagine if you were visiting a shopping mall when suddenly you felt your were going into diabetic shock, you fell onto a bench but no one understood your pleas for help because they did not speak English and they didn't know if you were drunk or sick, so they ignore you. Diabetics can die if not treated quickly in these situations. **There are occasions when it is necessary to be able to communicate and be understood**. You would want a doctor, fire department, or police to understand you especially when you need help. What if you were visiting another city when you suddenly need help and no one around you speaks English. This is not far fetched as in many U.S. cities there are places where English is not understood by most people in that area.

Thousands of people have died from improper use of medication, diseases, parasites in drinking water, and preventable diseases such as diarrhea partly because they did not understand written directions or instructions given them by health workers who did not speak their language. Over 10,000 people have died and many thousands more made ill in foreign countries by eating grain that was sprayed with insecticide meant for planting that was clearly marked in English "not for human consumption".

Humans around the world are not becoming fluent in English in sufficient numbers to guarantee English will be the world language of the future. In the US 1 in 7 do not understand English. In California it is 1 in 3. In many cities over 30 percent do not now understand English. In Miami, forget it. Although English is in a favored status among intellectuals English learning is in failure around the world even after being promoted since the middle nineteen forties. People around the world are not becoming fluent in it as was expected. English is now understood by only about 8 percent of the world's population and that percentage is declining. That means that about 92 percent of all humans do not speak English. It has fallen from second to third place and soon will be in forth place after Spanish. When people want to send messages to people in other countries there is often a huge language barrier. The truth is apparent, not everyone understands spoken and written English, and most people of the world do not want to take the time (five years) to learn it.

ESPERANTO RESEARCH IN GENERAL

Doctors Alvino E. Fantini Director of Bilingual-Multi cultural Education School for International Training and Timothy G. Reagan Department of Educational Leadership University of Connecticut in their research book on Esperanto concluded that "Based on the research that has been conducted thus far on the teaching and learning of Esperanto, a number of conclusions can be drawn with reasonable certainty. The empirical evidence, though far from incontrovertible, is generally in accord with anecdotal evidence with respect to claims about the ease of learn ability of Esperanto, its propaedeutic effects on learning additional languages, its use in teaching students about the nature of language in general, and its positive affective benefits for students" (33).

ESPERANTO PHENOMENON

"Esperanto appears simple, but it is a phenomenon of considerable complexity...an ideological phenomenon and a *psychosociological phenomenon*. Thanks to the 'Lingvo Internacia,' a movement came into being that today extends to over a hundred countries. Although people of many nationalities and social backgrounds work together in this movement, it maintains a fundamental unity of purpose, less because of its formal organization than because of its psychological impetus... creating out of them a genuine Esperantist consciousness, based on a broad sense of high ideals" (Janton, Forster).

As the world becomes more international there is growing need for commun ication between languages. Esperanto is the only planned language that has survived and passed the test of time to become an actual living language. "The fact that Esperanto, alone among the planned languages, acquired a large community of speakers, merits special attention. Today it is used by individuals and social groups [worldwide] for a wide variety of purposes (Janton 18).

Esperanto is the world's most modern and easiest to learn language. By scientific design the grammar has 16 basic rules. There are no exceptions or irregularities. It holds the world's record (Guinness 147). This eliminates hundreds of pages of grammar and the hundreds of hours needed to master them in all other languages. The present, past and future tenses of all verbs in the language can be learned in one minute. No other language even comes close to that. Eastern people find it five times easier to learn than English. By using word endings, prefixes, and suffixes, the vocabulary has been simplified so it is one fifth the size of most languages, and this has been accomplished without any loss of meaning. Even the 42 member French Academy of Sciences stated that Esperanto was "a masterpiece of logic and simplicity" and should be introduced into the teaching of science, used as the official language of international conferences, and used in scientific publications (Janton 83).

"Grammatically it is a synthesis of the Indo-European family of languages, while its morphology is agglutinative" (Edward Symoens 8). Esperanto is based on international word roots of many languages. This makes it **easier to learn because many of the word roots**

are already known. Example "hotel" is the root word for "hotel". By knowing English one can recognize **thousands** of Esperanto words. For English, French, Spanish, German or European speakers, Esperanto is easy to learn and one also learns many of the words from those languages. This combined with its scientifically designed word building feature makes Esperanto learnable in one-fifth of the time needed to learn all other languages. The California Esperanto Education Commission states in its *Esperanto Handbook For Teachers* that Esperanto is <u>five times as easy to learn</u> as any other language. <u>It has been called The Articulate Language</u>, meaning it is clear, effective, and ready of expression.

Esperanto **efficiently uses prefixes and suffixes to eliminate memorization of thousands of words**. For example the prefix *re* when placed in front of any word creates a new word. *Mal* placed in front of any word gives it the opposite meaning. By just learning one little prefix, one saves the time consuming effort of learning thousands of words which one would have to learn in any other language.

Esperanto belongs to the most frequent language type the SVO subject-verbobject. The use of the "n" to name the object permit translations to and from many languages that are impossible to do with English, French or many other ethnic languages (Janton 67-73).

One can often say things in Esperanto that are impossible to express in many other languages. Often one word in Esperanto may replace several words of another language. There are **many words** in Esperanto that are **missing from other languages, even English.** All this can be accomplished even by beginners without need for extensive memorization.

"The flexibility and variety of compounds in Esperanto allows for remarkable lexical economy...it nevertheless provides a conciseness and density of expression that many ethnic languages cannot match" (Janton). "Esperanto can assimilate to itself more structures than any individual ethnic language. In this adaptability lies its true internationality. Although it is not limitless, it far exceeds what is possible in other languages, making Esperanto an international language in the fullest sense" (Janton 85). The World Almanac and Book of Facts states "Esperanto was savaged by Nazism, Stalinism, Fascism, the Japanese militarists of the 1930's, and chauvinistic groups in many other countries. Not until the late 1950's did the number of speakers begin to show the steady increase which continues...." It is the greatest success story of any language as it was spread at the grass roots level by people who fell in love with it and not by money or power. They learned it because they wanted to, not because they were forced to. They took on learning a language on their own. Esperanto works. It has beaten the odds as the people's choice in spite of overwhelming odds against it. "Esperanto alone became a living language, spoken by more people than 95 percent of the known languages of the world... Esperanto stands apart from the ethnic languages in that it alone is capable of fully performing the role of an international language... all ethnic languages remain essentially national, based on national cultures, while Esperanto is essentially universal" (Janton 132).

PUBLICATIONS

More novels have been published in Esperanto in the past fifteen years than appeared in the previous ninety (Janton 106). Over 30,000 works of literature have been put into Esperanto (Eichholz 392). An estimated 10,000 works have been translated into Esperanto. "There are over 160 specialized dictionaries in fifty or more fields, including cybernetics, mathematics, informatics, law, medicine, theology, chemistry, meteorology, gastronomy and so on...taken together, they constitute a collection that relatively few languages could equal" (Janton 82). "There are more than 2,100 Esperanto textbooks in over fifty languages" (Janton 122).

TAXONOMY

The taxonomy used in the following studies is the one most used by Esperanto researchers

namely that there are three essential classes of morphemes (units of meaning): roots, affixes and endings. This system is very simple. Roots are syllables or groups of syllables that indicate meaning such as a concept. (tabl, pur, turn). Affixes are syllables which modify or limit the meaning of the root. (re, mal, in). Endings are ending sounds which add to the meaning. (as, a, o). Other researchers use other words to describe root such as lexeme, moneme, word, lex and lexical morpheme. Note the word "root" is not used in this book in the English sense meaning etymology.

RESEARCH ON AND IMPORTANCE OF WORD FREQUENCY STUDIES

Word frequency is not only important in the designing of teaching materials. Recent discussions have centered on using a basic vocabulary of international Esperanto words world wide giving the possibility of promoting greater interest in Esperanto. Most people world wide are not talented in learning languages and do not have the inclination to learn another language. Most people feel that they do not have the time to learn another language. Many feel that it would be too difficult. Many have already decided that they are not going to learn another language. "Even among the many people sympathetic to the cause of Esperanto, who support it in theory and in principle, relatively few take the step of actually learning the language" (Janton 126). There is also a psychological resistance to learning another language as an adult as noted by Claude Piron and Janton (Janton 127) (Eichholz, Piron 518).

The idea of a small basic vocabulary of international words overcomes much of this resistance perhaps because people can rationalize that they are only learning a vocabulary which gives them a big payoff of inter-language understanding and communication without years of work. If a basic international vocabulary of international words were available that could cover 90 percent of common communication many persons may decide to learn it.

In the process they learn about Esperanto and hopefully go on to learn more Esperanto, which for many, still symbolizes world friendships, brotherhood, and peace. "Esperanto continues to symbolize the idea of world understanding and a universal order" (Janton 127). In talking to many people particularly Americans, it is discovered that most will not commit to learning a language, but many consent to learning a vocabulary of international words.

There are great promotional possibilities for Esperanto in advertising a basic international vocabulary of basic Esperanto roots. It could also be used on the internet between individuals as the need for quick inter-language communication becomes a necessity in coming years. Here documents can be easily composed at home and work. The few unknown words are looked up, then the text is saved on disk, then transmitted. Indeed many are already doing this, including this researcher, who reports successful communication with many speakers of other languages around the world over the internet and by letters.

Zlatko Tisljar, a researcher, states that it takes 2000 words to cover 80 percent of the words of most Indo-European languages whereas Esperanto only requires 563 words. He also states that it appears that **Esperanto requires about one forth the elements to be learned as other languages**. Zlatko Tisljar in his *Frekvencmorfemaro De Parolata Esperanto* (Internacia Kultura Servo Zagreb 1980) examined word frequency by taping conversations in the international language with permission and then analyzing them. He found that only 467 roots gave a 95% level of understanding in most common conversation. He found that only 786 roots provided a 98% level of understanding and that for basic language knowledge only 460 morphemes suffice. Easy novels contain about 500 morphemes. The first 15 morphemes covered 47 percent of the corpus.

The first 100 covered 77 percent 117 covered 80 percent

172 covered 85 percent 265 covered 90 percent 467 covered 95 percent 520 covered 95.8 percent 786 covered 98 percent 1343 covered 100 percent

A word frequency study done on hundreds of international letters written in Esperanto, gave approximately the same results as Tisljar. It showed that a basic vocabulary consisting of approximately 288 roots covered 90 percent of the words used in common international letters. Wesley Arnold M.A., who spent months doing this study, was not aware of the work of Tisljar at that time.

Rudiger Eichholz who is a member of the Esperanto Academy states, "Not much study is needed to read and understand 95 percent of an average Esperanto text" (Eichholz 449).

A study using the American Heritage Dictionary Corpus of over 5 million words showed that 90 percent of the most common 6000 words in the American Heritage Corpus could be covered by about 850 basic Esperanto word roots and grammar. Those six thousand words constitute over 90 percent of all written English.

A BASIC VOCABULARY OF 850 WORDS COVERED:

100% OF THE FIRST 500 WORDS; 99% OF THE FIRST 1000 WORDS; 98% OF THE SECOND 1000 WORDS; 90% OF THE NEXT 4000 WORDS.

Two word frequency studies of Esperanto used on the internet, by Wesley Arnold analyzed over 200,000 words each. Results showed that 90 percent was covered by 450-500 word roots with a total of 1200 roots used. This was with proper nouns, removed because these would have to be learned anyway regardless of language.

See "Aktoj de la Akademio II" page 38 for results of lists from 16 million words. An analysis done on the 1000 most frequently used English words on the internet. The 1000 words came **from 343,945,617 total words** copied by Rick Walker from one year of internet Usenet news group messages. The analysis showed that only 397 International Vocabulary morphemes were required to form the 783 most used English words. The remaining items were: proper nouns such as names of persons; letters of the alphabet, parts of addresses, technical abbreviations or duplicate words. The analysis shows that Esperanto only requires about one half of the number of words to be memorized than English for the most common 1000 English words. This analysis agreed with one done on the 1000 most common words based on the 5 million word American Heritage Dictionary Corpus. Both analyses done by Wesley Arnold M.A.

Of the highest frequency 6000 word level of English, which covers 90 percent of all written English, Esperanto only requires 14 percent of the words required by English. This fact is easily verifiable by simple count. It is often claimed that Esperanto is 1/12 the size of any language but that depends on which language one compares it with. English has over a million words while Esperanto has 16,000 root words. This is 1.6 percent or 1/63 the size of English. All other languages are smaller than English. Exact figures and percentages are not meaningful to many people or may bring on arguments. Anyone promoting Esperanto can safely claim that it requires less than a quarter the number of words to be memorized in total.

What all this adds up to is that this vocabulary can enable persons to communicate directly between languages in significantly less time and with significantly less cost. By using simple prefixes and suffixes thousands of words can be formed with specific meanings that are quite useable and concise all without having to memorize that word in advance.

PROOF THAT A BASIC ESPERANTO VOCABULARY WORKS

Kontakto a world wide magazine for new Esperantists and young people uses a <u>450 word</u> basic list plus grammar for all basic articles. For its advanced articles authors must clarify any word not on a list that includes <u>457</u> additional words. This magazine is very successful. Indeed many new Esperantists prefer it.

Language expert Claude Piron referred to the basic list above and basic Esperanto usage which can be taught in 32 hours. He proposed that it could be taught in just ten minutes a day during the school year (Piron 317).

Juna Amiko magazine uses a basic word list of <u>950 words</u> for all of its articles. Authors must explain any word not on this list.

According to Edward Thorndike, 10,000 English words account for 98 percent of all running words. 10,000-20,000 account for only 1.7 percent and 20,000 to 30,000 only account for 0.5 percent. The average vocabulary is about 10,000. The most common 1000 words account for about 80 percent (Thorndike, Teachers Wordbook of 30,000 words, 1944).

Vilho Seta'la's research finds that English requires a basic vocabulary of approximately three times that of Esperanto. Only 790 Esperanto roots as compared to 2350 English words from ordinary text reached a level where readers needed to look up one in every 10 words. For a level of one in fourteen words only 965 Esperanto roots were needed as compared to 3000 English words. From *La Genio de Zamenhof: Efekta Lingvo* de Vilho Seta'la' in the *Memorlibro pri la Zamenhof-jaro* compared English and Esperanto.

Resto de nekonataj vortoj

en ordinara teksto		Lernitaj voi	rtoj unknown words
	Angla	Esperanto	
16/o	1400	550	1 in every 6 words
10	2350	790	1 in every 10 words
7	3000	965	1 in every 14 words
3,2	4700	1400	1 in every 31 words
1,0	7000	2000	1 in every 100 words
0,25	10000	2800	1 in every 400 words
0,15	?	3000	1 in every 666 words

"La ekzemplaj ciferoj estas elektitaj parte por povi kompari ne nur saman kvoton de kompreno, sed ankauh la efekton che kono de sama vorttrezoro.... Sed aliparte, montrighis, ke che tiel malgranda lingvoscio, se la konataj vortoj vere estas elektitaj el la plej ofte bezonataj, donas la eblecon interkomprenighi en simplaj, chiutagaj temoj. Ghuste chi tie la bezona vorttrezoro angla kaj esperanta ne estas strikte kompareblaj. char lauh la esploroj de Thorndike jam la 850 plej oftaj anglaj vortoj havas sume pli ol 21.000 sencojn, dum la 550 bazaj vortoj de Esperanto estas praktike po unusencaj. Des pli okulfrapa estas la konstato, ke jam tiu vortnombro, 1400, kiu en angla lingvo

sub certaj kondichoj donas la eblecon al apenauh kontentiga chiutaga babilado, en Esperanto sufichas por facila legado de ordinara teksto 3,2% da nekonataj vortoj, el kiuj la plej multaj estas t.n. internaciaj kulturvortoj... La rezulto, nekomprenata resto de 0,25% (2-3 vortoj el mil tekstvortoj), fakte jam signifas posedon de la lingvo. Sed se oni en la lernejo povas atingi la aktivan konon de 3000 anglaj vortoj apud la enkapigo de _ia gramatiko (12424 formoj lauh Thorndike) kaj vasta kolekto de fiksaj dirmanieroj, kiom pli certe oni atingus la aktivan

posedon de 2800 esperantaj radikvortoj, apud ghia simpla gramatiko kaj vortfarado, sen la fiksaj frazkonstruoj. Ghi estas, baze de la vortaro sole, kelkdekoble pli granda ol la efekto de angla lingvo, kiu tamen ghenerale estas konsiderata unu el la plej facilaj el la historie evoluintaj lingvoj."

VERSATILITY OF ESPERANTO

Edward Symoens stated "The creation of new words is limited only by the limits of meaning" (Symoens 10).

The extensive research of Charles K. Ogden proved that most books could be translated into works using about 1000 words with a glossary for special terms. Ogden and his fellow researchers stated that around 1000 English words could give near 100 percent understanding of most human communication. Hundreds of books were translated into Basic English and were promoted by Winston Churchill and others. He proved that 1000 words did the work of 20,000 words. He published a dictionary that used about 1000 words to form 20,000 words and 40,000 senses. A basic Esperanto vocabulary of only 800 roots far surpasses that. Also it was discovered that a basic vocabulary of 200 words could translate over 4000 verbs (Ogden).

From the first 288 Esperanto root words over 20,000 practical meanings can be formed. At least 93,000 meanings including 20,000 practical meanings can be made from 288 basic words. From 800 basic roots a total of over 50,000 practical meanings is estimated. Just from the root "help" 840,000 meanings were actually created of which over 3,000 are practical.

Edward Symoens states "Originally there were 904 roots making possible about 10,000 words. Today the roots number about 15,000, and from these it is possible to construct about 200,000 words. These numbers are continually growing in line with human development. Indeed, there is no limit to word or morpheme combinations in Esperanto other than that dictated by the meaning of the combination" (Symoens 12). Rudiger & Vilma Eichholz state that there are over 16,000 roots from which 160,000 words can be formed (Eichholz 17).

TOTAL ROOTS

The total number of Esperanto root words is over 16,000. The Plena ilustrita vortaro of 1970 has about 15,250 and the 1987 supplement has 850 additional roots.

PADERBORN

Educational experiments done at the *Instituto pri Kibernetika Pedagogio* at the University of Paderborn in Paderborn, Germany are according to Edward Symoens some of the most recent and most important. Professor Dr. Helmar Frank supervises a team which reports on experiments which **show scientific confirmation of Esperanto's advantages**. In teaching language awareness, an introduction to foreign language study for children ages 8-10 was conducted using Esperanto as a reference norm. "Because it is so well suited to children, it has been found very effective. Scientific measurement has shown that: - children's interest in varieties of European culture and language grows considerably; it requires less time than that which is saved later in learning other foreign languages; it facilitates the teaching of even the native language, of geography and mathematics; it creates at an early age the ability to communicate across ethnic boundaries, so that the children's horizons are not limited to the homeland of one privileged language. It thus opens the way to improved understanding between peoples, free from linguistic discrimination."

Symoens adds that these experiments have so far taken place in schools of the Federal Republic of Germany, France and Hungary. (Symoens gives his source as Minutes of the annual November meetings in Paderborn, "Laborkonferencoj -Interlingvistiko en Scienco kaj Klerigo"

Students competence was subjected to a practical test when 85 students not selected for

their academic success . . attended a vacation school program in one of the five countries. Since students did not have a common language except the Esperanto that they had learned in class that language was used to teach lessons at the vacation camp. The staff, and students who were of diverse language back grounds and even visitors used Esperanto successfully for all communication (Wood 1975 64).

Doctors Fantini and Reagan state

The results obtained by the researchers at the Institute pri Kibernetika Pedagogio are of quite high quality, and generally appear to support both claims about the ease of learn ability of Esperanto and claims about its propaedeutic benefits. Perhaps most interesting publications of the Instituto pri Kibernetika Pedagogio have been Professor Frank's work on the development of a cybernetic-pedagogical representation of the relative propaedeutic benefits of Esperanto. . . (32).

FACILITATES LEARNING OF OTHER LANGUAGES

"The study of the international language Esperanto facilitates the acquis ition of English." On page 25 Symoens states "After 80 hours of "language awareness' teaching, pupils in the fifth year of elementary school had a slightly greater amount of prior knowledge for starting to learn English than had their peers without 'language awareness' (respectively 9% and 7.7%). After 36 hours of English, this difference in competence did not diminish, it actually increased four times, proving that there was in addition a transfer of knowledge. This gain repays the time invested in the language awareness course within three years." Symoens gives as the source: Evelyn Geisler, "La unuaj mexuradoj pri la lernfaciligo inter internacia kaj angla lingvoj" in Europa Dokumentaro 21/1979, pp. 9-10 (Symoens 26).

Learning Esperanto increases success in learning English. At the *Instituto pri Kibernetika Pedagogio* a study done in 1978 using 194 children, showed that <u>those who learned</u>. Esperanto as a model foreign language in years three and four of elementary school were more successful in learning their first foreign language English. The source was Dr. Brigitte S. Meder, "Efikoj de la lingvo-orientiga instruado al la lernsukceso in la mezgrada lernejo" in Europa Dokumentaro 20/1978, pp. 15-18.

<u>Dr. Mario Pei Professor of Romance Philology at Columbia University</u>, respected linguist and author of many books states: Esperanto has been tested in the schools as an introduction to the study of foreign languages, and the experiment has **successfully demonstrated that Esperanto-trained youngsters did better in the languages they took up later** than did the ones who did not have the training.

The famous studies of Edward L. Thorndike also found that the learning of Esperanto facilitated learning other languages. See the following paragraphs.

LEARNING TIME

The famous educational psychologist Edward L. Thorndike directed a study that focused on issues as learn ability and propaedutic effects of Esperanto study and fount that "An average college senior or graduate in twenty hours of study will be able to understand printed and spoken Esperanto better than he understands French or German or Italian or Spanish after a hundred hours of study" (6). The report makes an even stronger claim: "On the whole, with expenditures of from ten to a hundred hours, the achievement in the synthetic language [Esperanto] will probably be from five to fifteen times that in a natural language, according to the difficulty of the latter" (7). The report also found that studying Esperanto first gave students a framework which helped them learn other languages (Thorndike 6).

In Edward Symoens's book The Socio, Political, Educational and Cultural Roots of Esperanto on page 25, Professor Helmar Frank stated it took <u>1500 hours of study on English</u>, <u>1800 on French and only 60 on Esperanto</u> and he found that he was still at a loss for writing a

paper in English and French. Professor Frank found that 1500 hours of instruction are needed for a French child to reach the baccalaureate level in English but that only 150 hours are sufficient for the same competence in Esperanto (Janton 123). "This conclusion agrees with the findings of other experiments. All of them reinforce not only that Esperanto can be learned with relative ease, regardless of the student's linguistic background, but also that Esperanto helps students to learn their own languages and other foreign languages better, and increases their motivation to learn about other countries" (Janton 123).

Symoens also shows a study by Gard Meinhardt "*Latent knowledge* of vocabulary of the international language, arising from ones native language." in Europa Dokumentary 18/1978, pp. 13-15. This study showed that the **latent knowledge** Esperanto of French, German and Dutch-speaking children could be measured and was 33.6%, 13.85% and 13.1%. It also took the three groups 48.1 hours, 52.6 hours and 52.7 hours to complete a vocabulary and grammar of a given Esperanto course (Symoens 26).

Former UN translator and language expert Claude Piron states that <u>only 32 hours is necessary to learn basic Esperanto</u>. He states that one year of Esperanto study gives the same level as the highest level of university study. (It is so easy that most people learn it on their own.) He states that only 10 minutes a day for 190 days which is one school year is sufficient to learn a basic Esperanto (Piron 319).

Tibor Sekelj said that enough Esperanto can be learned for general reading knowledge in a few months to a year (Eichholz 393).

"Controlled experiments show that because of its logical structure, phonemic spelling, and regular grammar [Esperanto] can be learned to a given criterion of performance in from 1/20 to 1/5 the time needed for the learning of a typical national language" (Hoffman, 1992 601).

David Richardson stated "Thousands set out to teach themselves a foreign language few actually succeed, but for the vast majority the task is to great. By contrast a substantial proportion of the Esperanto speakers, world-wide, have learned the language on their own, often from a book. "Students in high school & college generally learn Esperanto in a remarkably shorter time" than they would have spent studying a foreign national language (Richardson 29).

Esperanto is the only international language in which fluency is acquired readily by peoples outside of the Indo-European language area (Eichholz 229).

Esperanto is one of the most expressive languages in world some people learn it in a few days (Richardson, 1988 20). Richardson quotes Pierre Janton, L'Esperanto, Que Sais-Je Paris: Presses Universitaires de France, [no date] "Recent experiments in some English schools have shown that the <u>average student there can learn as much Esperanto in six months as he can learn French in four years."</u> He goes on "The comparison seems to be even more striking for Asians, who have a great deal of difficulty learning Western languages" (Richardson, 1988 20).

Former UN Translator and renown linguist Claude Piron states that it is extremely difficult to master a foreign language. In spite of 40,000 hours spent with English, he, a professional translator feels that he has attained only 78 percent proficiency. But in Esperanto, he attained 100 percent proficiency in significantly less time. He states that at the UN, often people who have studied English for years speak it so poorly, that sometimes even the translators cannot understand them. Sometimes they just make up parallel speech. There are many mistranslations in the direct translation of speech as well as in the written translations printed by the UN. He estimates that it takes about 12,000 hours to become fluent in a foreign language such as English but even 40,000 hours will not serve to place the foreigner on an equal footing with the native speaker. He mentions that English is a "briar patch of unclear expressions." He gives an example of students who had studied English for six years yet were unable to understand a simple phrase from an American magazine. The phrase was "done in". He states that English is very hard to pronounce and to understand

from listening as there are many vowels which sound like one vowel to most foreign ears and he gives examples. Piron states this difficulty of understanding spoken English has contributed to airplane crashes because the pilot could not understand the English coming from the tower. In spite of the clarity compared with Italian, English was selected to be the language of international aviation. He states that not a few people have died because of this unfortunate use of English. He states English is unsuitable not only because of the above but also due to its illogical spelling. He reveals that the American Heritage Dictionary gives eleven ways of spelling the sounds *sh* and *ee*. **More than forty sounds in English have from between two and eleven ways in which they are spelled** (Piron).

A look at any large English Dictionary will show that the forty four (note the spelling of four and forty) have 232 ways of being spelled and are highly irregular.

There are thousands of English words whose spelling must be memorized because they do.

There are thousands of English words whose spelling must be memorized because they do not necessarily correspond to their sound. This places a burden of hundreds of hours of memorization time on those striving to learn English. There are millions of native English speakers, indeed the majority, who after 13 years of school cannot even type a page without misspelling words because of antiquated English spelling. English spelling rules have so many exceptions that it is unclear why they bother to call them rules. Indeed are there any English spelling rules without exceptions. Since English has over a million words, and since there are no valid spelling rules, the learner of English must memorize the spelling of every word to be sure it is spelled correctly.

Professor Bruce Sherwood reported that <u>Japanese speakers claim to find Esperanto "five to ten times easier to master than English"</u> (Sherwood, 1981, 2). "French linguist Pierre Janton tells of Japanese students who, after some eight years study of French, could speak it only with difficulty, whereas they spoke fluent Esperanto after two to three years. (Richardson, 1988, 118). English as a Second Language teachers find that average people may take over 10 years to master the speaking and writing of English. Many students of English even after many years of study still make many grammatical errors in speaking and cannot write a business letter.

The massive failure of English teaching in communist China is verified in an article in the Teachers of English to Speakers of Other Languages Journal. In an article entitled The dilemma of English Language Instruction in the People's Republic of China by Keith P. Campbell and Zhao Yong it states that China has created foreign language institutes where following six years of secondary school English instruction students study English 16-18 hours per week for 2-4 more years. "Unfortunately, even the most diligent students with the most responsible teachers often cannot communicate effectively with the target population after 10 years of studying English" (4).

Even learning a first language is a gradual process taking years. A conservative estimate for learning time of the first language is 12,000-15,000 hours (Lightborn 1985 in TESOL Quarterly).

Consider the fact that the average person takes over 10 years before he writes, reads and speaks with full fluency. Many people don't do much better by age 18.

The fact that speaking and writing fluency can be achieved in Esperanto in under year shows that the design is very time efficient-much more so than with any other language.

ESPERANTO IN SCHOOLS

Renowned educational psychologist Edward L. Thorndike found that **one year of Esperanto instruction at the college level equaled four years of instruction at that level in French or German. In a study at Columbia Teachers College**. (Eichholz 449)
(Thorndike), experiments sponsored by UNESCO (1973-1976) with around 1000 school
children from various European countries confirmed Thorndike's finding (Janton 123).

An experiment in Central and Western Europe involved 145 10-11-year- old students in separate countries. Each group as follows did not speak each others language.: 52 German

speakers; 34 french speakers; 45 Dutch speakers; and 14 Croatian speakers. They received instruction in Esperanto for two hours per week (140 total hours). The students from separate countries were brought together for a week at the end of the study. The conclusion was that "Esperanto showed itself to be a completely suitable means of mutual understanding and a thoroughly satisfactory means of instruction in the various subjects." source Helmut Sonnabend, *Esperanto - Lerneja eksperimento*, 1979 (Symoens 29).

A twenty-five year study at the Denton Grammar School of the propaedeutic effects of Esperanto study included a four year study by Sheffield University. These studies showed that Esperanto study had a positive effect on further language study. Less academically able students in particular benefitted from initial Esperanto instruction (Williams and Halloran).

There were two "five-country" experiments the first from 1971-1974 the second from 1975-1977. Nearly 1000 students from 32 schools were taught Esperanto as their first foreign language. The findings were: that in a classroom setting students are likely to learn more Esperanto than they would a national/ethnic language over the same time period; That Esperanto can be successfully taught in the classroom setting in ways comparable to the teaching of other languages; that the claims of the ease and speed of learning Esperanto were strongly supported [Fantini].

In comparison to the German control groups the studies showed that "<u>Children learning Esperanto were able to learn more in two years than other children learning English in three or four years</u>. . . the Esperanto groups would require a total of 2.5 years to obtain 100 percent mastery of the material presented in this test, whereas the English groups would require 5.3 years to achieve a corresponding result (Maxwell, 1988: 58).

Doctors Fantini and Reagan add "This is especially impressive when one takes into account the fact that the Esperanto group were three to fours years younger than the English group -- thus, the Esperanto students are learning more, faster, and at an earlier age" (32).

In schools where Esperanto has been tried the students, staff and administration have given it good reviews. Even UNESCO has given it the recommendation for use in schools worldwide.

At Terrace Elementary School, a teacher reports that the kids were not profiting from Spanish so the teaching was discontinued. When the teacher introduced them to Esperanto they responded well. "Something unique happens in teaching" Esperanto. "The children learn how language functions; the puzzle--or word-building--unravels" (E-0 USA 1992(5) 7).

At the Alcott Elementary School after only three weeks of instruction mostly during lunch time students were able to demonstrate basic skills to an audience of teachers and the Board of Education. The class is now corresponding via post cards to over twenty countries. The president of the local school council was quoted as being very pleased with the inclusion of International Language in their curriculum. The staff hopes that the kids being turned on to languages will learn other languages, so they will become literate in more than one language (E-o USA 1992(5) 6).

Esperanto turns many students on to languages; it sometimes motivates them to learn other languages.

In the elementary grades, pupils soon find themselves putting the language to practical use. Doris Vallon, reporting on forth, fifth and sixth grade classes in some California schools, noted that some of the brighter children were writing Haiku and Cinquain poems in Esperanto after only five weeks, and performing puppet shows and skits. Ms. Vallon's forth grade class. "learned enough Esperanto in one and a half school years to correspond with classes in ten countries." [remember this was only after a few minutes a day of instruction] (Vallon, 1968, 8013). This could have been 100 countries as once they know enough to correspond they can write to any other person knowing the basics of the language in over 100 countries. Vallon goes on:

They wrote one another about family, school, hobbies, music. They learned to read folk tales in Esperanto from many countries They

developed poise (talking with) Esperanto speaking visitors from many lands. . . . We were overwhelmed by the natural understanding they showed of pupils in other lands. The fact that they and their friends abroad had each came half way toward understanding by learning a common tongue seemed to remove the insidious distinction between 'native' and 'foreign' that might have arisen if neither group had been using the language of the other. The children took a new, heightened, personal interest in geography, a subject that previously meant little to them (Vallon, 1968 in Richardson 1988).

Another teacher noticed that elementary students became much more motivated to learn about other countries and peoples when shown letters from real people in other countries they could actually write letters to.

Claude Piron, in his new book on the language situation, describes a pedagogical experiment done with 11-year old children from two countries where the languages were very different. (Slovine and German) The children were given only 24 hours of instruction in Esperanto. The two classes were brought together and it was discovered that they were successfully conversing quite well on the topics of ordinary life (Piron 316).

Piron goes on to say that the return on Esperanto is so high that a few hundred monemes gives astonishing expressive power. He feels that students could be taught as few as two morphemes a day in about two minutes then eight minutes for sentences and practice. This can even be integrated into other subjects. He stated that in only 10 minutes a day for 38 weeks the face of the world history could be changed. We could have a complete generation of humans who can understand each other (Piron 317).

He gives another example about a mechanic who was sent to another country. This mechanic did not speak the language of that country, but was expected to train workers in certain kinds of repair. He did manage to find an interpreter but things went very slowly. Piron points out that if both the mechanic and the students could have spent only 30 hours studying Esperanto, the inter-language instruction would have gone much smoother and in fact would have taken less time in the end.

Piron states that learning Esperanto helps students understand their native language better. It can also decondition the student from the arbitrary rules and habits of the native language without having to recondition oneself to the habits of a foreign people (Piron 320).

Knowledge of languages is greater and deeper in a sampling of people who learned Esperanto then in the general population (Piron 320).

Learning Esperanto often leads to the desire to learn additional languages (Piron 320). It prepares the ground for learning other languages. It is like a preparatory exercise. It provides an easy transition to learning languages. There is no sudden shock as there is with other languages. There is even space around vowels making them easier to pronounce. There is a lack of arbitrariness. The student progresses rapidly getting a good feeling out of it, getting a good level of expression and great satisfaction and confidence. The student can read texts from many countries all over the world and feels respected. He is not dictated to, but rather can create his own way. Esperanto is a language made for man rather than man for the language. Man is not a slave to the language as with other languages where he has to bow to the endless needless rules and exceptions. Esperanto is adapted to the needs of humans. The student feels liberated as he has the right to invent words and apply linguistic creativity. He can express a single idea by many ways without being discouraged. He acquires the means of analyzing semantic relationships and grammatical relations (Piron 323). He learns to relativize the concepts of his mother tongue. He exercises speech without doing a foreign model. This first apprenticeship builds power, and flexibility and positive feelings (Piron 324).

Both convergent and divergent thought are used in learning Esperanto. The same idea can be expressed in many ways. Students found 70 ways to say a sentence. <u>Divergent intelligence is used more in Esperanto</u>. **Often words are created that have no equivalent**

in the native language of the speaker. Students are not hindered by arbitrary rules as in other languages. With Esperanto students have freedom from the straight jacket of rules and exceptions (Piron 328).

WHERE TO FIND ESPERANTO TEACHERS

In "Teach Children and Children Will Teach the World" Charlotte Kohrs mentions that Teachers to teach Esperanto can sometimes be recruited from the ranks of classroom teachers. In 1994, 19 expert teachers, some of whom are still working on the free postal course, introduced Esperanto to children. This proves that for introductory courses one does not have to be an expert Esperantist to teach Esperanto to children. They are using the book by Charlotte Kohrs entitled "Dek Demandoj" which provides immediately usable pages for classroom teachers and for Esperantists who are not necessarily expert teachers of children. It is noted that the teachers are not trying to make them into expert Esperantists. Sometimes the classes are held twice a week during lunch, and sometimes they use guest Esperantists. "In overcrowded school curricula, very few teachers are able to find more than one hour a week for Esperanto." Children's immediate response to the idea of a world language, their eagerness and successes, and by achievements in a few schools where children can study Esperanto daily, may encourage more teachers to fit Esperanto into their schedules for at least half an hour twice a week and the needed 10 to 20 minutes daily practice (Kohrs 3). In 1994 just in these 19 schools, 756 children were favorably introduced to Esperanto. If both parents and one friend are then touched with a favorable impression, then about 3000 people that have received a good impression about Esperanto (Kohrs 15).

MONDO-RONDO (World Round)

In the above article Kohrs mentions that they make learning Esperanto fun and help the children discover that they can <u>use</u> it to learn about other countries, peoples, and customs. They can even find friends around the world. Mondo-Rondo is a project in which groups of children in many countries exchange picture postcards on which they write short Esperanto messages about the cards. This stimulates interests in other class subjects such as geography. Kim Keeble reports from Nova Scotia that Mondo-Rondo has been successful and adds "Children who have been studying French for several years can say more in Esperanto than they can in French." She also notes that the Mondo-Rondo and the Geography in the booklet *La Bela Planedo* are what sold the program to the school (Kohrs 15).

THE INTERNATIONALITY OF ESPERANTO LEXEMES

In "La tipologia loko de Esperanto" in *Lingvistika Simpoziumo* it is shown that the vocabulary of Esperanto is related to the Indo-European group. In respect to phonetics to Malay, Bantu, Iranian and Italian. And in respect of linguistic structure it is related to the isolating group (Malagasy, Chinese, Vietnamese...) and also to the agglutinative group (Turkish, Japanese, Hungarian) (Symoens 27).

"Seventy-five percent of the lexemes in Esperanto come from Romance languages, primarily Latin and French; 20 percent come from Germanic languages; the rest include borrowings from Greek (mostly scientific words), Slavic languages, and, in small numbers, Hebrew, Arabic, Japanese, Chinese, and other languages" (Janton 51).

Edward Symoens in his book The Socio-Political Educational and Cultural Roots of Esperanto continues by giving the proportion of lexemes common to Esperanto and other languages as: 91.64 percent French; 89.50 percent English; 89.12 percent Italian; 87.79 percent Portuguese; 87.12 percent Spanish; 81.70 percent German; 64.78 percent Latin; 53.26 percent Russian. Symoens gives at his source I. Szerdahelyi, *Medodologio de Esperanto* Budapest 1975, based on the 4,155 lexemes of the *Naulingva Etimologia Vortaro* of Bastien.

"Latin lexemes tend to be chosen because of their internationality and hence perhaps

40 percent are immediately comprehensible to a Slav...Compared to other planned languages, the basic vocabulary of Esperanto displays a reasonably satisfactory balance among the various Indo-European languages, in proportion to their actual occurrence in international relations" (Janton 51). Janton notes that English is the most international of the national languages and that it draws over half of its words from the romance languages and that only 25 percent of its vocabulary is native. He also shows in detail how **Esperanto words were formed to avoid homophony, confusion, polysemy and to achieve greater internationality**.

Rudiger Eichholz a member of the Academy and expert Edmond Privat have both stated that Esperanto was 70 percent recognizable to an English speaker. (Eichholz 6). Others have counted the words in dictionaries and came up with 60-70 percent.

ESPERANTO WORD ROOTS ARE INTERNATIONAL

Are most Esperanto words common to several languages? Most Esperanto word roots are similar to word roots in several languages, the most common being English, French, Italian, Spanish, Portuguese and German. But it was surprising to discover a similarity with Danish, Norwegian, and even Rumanian. But a few Esperanto words were common to none.

Lexemes found only in Esperanto: .09 percent common with 1 language: 2.65 percent common with 2 languages: 3.99 percent common with 3 languages: 3.17 percent common with 4 languages: 3.30 percent common with 5 languages: 5.45 percent

common with 6 languages: 18.10 percent Most words, common with 7 languages: 35.30 percent common with 8 languages: 27.95 percent are here.

The coefficient of attainment targets reached: in Russian 30 percent; German 40 percent; English 60 percent; Esperanto 130 percent Symoens gives as his source *Universo* 1961 (Symoens 27).

Here are some common international words given in English form: chocolate banana bank brown bus dollar energy engineer fabricate grade hospital hotel hour in industry insect info June coffee carton chemical clear cost long March May machine metal minute mustard name nerve neutral night nose November numeral oil October packet paper pare park passport pill plant regulation religion restaurant risk rice rich sack salt soap September six ski special state student soup sugar taxi tobacco theater telephone television tiger tomato tea tricycle wine.

BASIC ESPERANTO INTERNATIONAL VOCABULARY

Basic Esperanto has been called international vocabulary for reasons presented above. For communication between speakers of different languages it is unsurpassed due to its: international vocabulary, ease of learning, efficient grammar with no exceptions, no difficult sounds, clear distinct sounds, no irregular verbs, quickness with which people can put it to use for reading speaking or writing and that it ends language discrimination by putting everyone on neutral ground. With basic Esperanto everyone wins. There are helperscontacts around the world in hundreds of cities where one can be personally greeted by a native speaker one can understand. **One can be an international person with contacts around the world**.

There are a few good reasons for calling it international vocabulary as opposed to Esperanto at least from a salesmanship point of view. Many people confuse Esperanto with Spanish. Many people are turned off by the word Esperanto which to them equals "foreign." As noted above there is a tremendous psychological resistance to learning foreign languages.

From a marketing point of view much of the public favors "*international words*" over "*foreign words*" and they favor "a *vocabulary*" over "a *language*" because it sounds easier. Basic Esperanto is mostly vocabulary and very little grammar. After a person has accepted the idea of learning an international vocabulary h/she usually doesn't mind learning how to use it by way of a few simple rules with no exceptions. One can experience almost immediate success, something that eludes most learners of other languages. Remember many people have already made up their mind that they will never have the time to learn any foreign language, but they do more readily accept the idea of learning a basic international vocabulary. They soon find that this is a language called Esperanto, but by then they have discovered what a good idea it is and that it is not nearly as difficult as learning other languages. In short it is just a good marketing idea to first present a more attractive concept as a first impression. Research shows that first impressions are often critical to the acceptance of an idea, and are often lasting.

IT CAN SAVE BUSINESSES THOUSANDS OF DOLLARS

A basic Esperanto vocabulary can save businesses thousands of dollars in training and translation costs. Most businesses today are still training foreign workers in native languages, a task that takes years, and is very costly. Since training people in Esperanto can be done in much less time it can be done at much less expense. Most research indicates the learning time is from 1/4 to 1/10 the time of other languages because it eliminates the memorization of thousands of genders, irregular endings, irregular verbs, inflections, duplicate words, irregular grammar rules, irregular pronunciations, regular spellings, irregular accents, idioms, and exceptions and other irregularities of English and other languages. Also learning Esperanto first facilitates people learning other languages especially English in less time. Since there are so many international words, people are actually learning many words from English, French, Spanish, German, and many other languages. Also people learn a simple, but complete grammar framework which helps them in later studies. See studies above that show that learning Esperanto first actually pays off timewise. (Two languages can be learned in less time than one if basic Esperanto is learned first.)

Translations to and from several languages are very expensive. The UN for example could save millions of dollars in translation costs by using Esperanto according to former UN translator Claude Piron.

GROWING INTERNET USAGE

The presence of Esperanto on the internet is growing. There now are: Esperanto Yellow Pages, Blue Pages, Home pages, texts, dictionaries, correspondence courses, newsgroups, chat groups, organizations, and even lists of esperantists showing over 1000 E-mail addresses in over 50 countries. Since a small vocabulary of 300-999 Esperanto root words can cover 90-99 percent of most common human communication people can use this for E-mail messages between languages. Postings in languages other than English are now becoming more frequent on the internet. No one owns the internet so one is free to use whatever language they want to use. This vocabulary is the most time efficient, easiest, quickest path to international communication between languages. It makes possible meeting the need for all humans to be able to understand each other around the world.

USING THE PRO LANGUAGE FORCES

The pro-English forces are very strong and many Americans feel that everyone should learn English. We can gain some support from them by pointing out that: this international vocabulary is a stepping stone to learn English; that it is more like English than any other language; that people can actually learn English faster after learning this regular framework

first; in the process of learning Esperanto they are learning a lot of English words. And we can enlist support of enthusiasts of other languages in the same way, and also by taking the position of promoting the learning of languages in general. There is much more to be gained by cooperation than by confrontation in this matter. There are many potential esperantists in the ranks of language enthusiasts around the world. Suppose we joined forces with language teachers at a local college in promoting several languages and succeed in having Esperanto promoted also. Everyone wins and benefits, and especially Esperanto.

PROMOTION

Esperanto is not being marketed to an effective degree. What few efforts are made, often make it appear as a foreign language. Most people do not want to learn a foreign language. But the appeal of a *basic international vocabulary* that is quickly learned, if promoted well, might open the door to millions of young people and others around the world learning Esperanto. Give them good reasons to learn it.

According to the World Almanac, English speakers (both native and non native) now account for only 8.2 percent of the world's population. That means that over 90 percent of the world's people do not understand English, and that percentage is increasing. English is losing ground to Spanish and some other languages.

If a wall chart showing basic Esperanto words to other languages were placed in classrooms, hospitals, bus stations, air terminals, train stations and other good public places this could greatly promote Esperanto. Short cable lessons daily presented on the new cable networks now being set up in schools world wide could give Esperanto a real boost. It appears that Esperanto is barely being promoted at all. If it is to succeed it needs more and better promotion.

SUCCESSES USING BASIC ESPERANTO VOCABULARY

Kontakto, a world wide magazine, regularly uses 450 morphemes in its basic articles and an additional 457 roots in the advanced articles.

Juna Amiko, a world wide youth magazine, uses up to 950 roots for all articles.

The following books which all are very popular and successful use basic Esperanto. "Vere au fantazie" uses 405 morphemes and teaches more. "Karlo" uses 500. "Gerda Malaperis!" uses 684 roots. "Mary kaj Sulo" 500 roots. "Lauta Vekhorlogo." "Verda Koro" 940 roots. Plus, thousands of beginners and people talking to them, use basic language with success

Durr's research on high frequency words found in children's books found that 188 English words provided 64 percent understanding. All of those words are included in the basic Esperanto vocabulary. All of Dolch's words from the famous Dolch sight word list are also included.

Word frequency studies on newspaper front pages show that a basic vocabulary can provide about 90 percent understanding.

Comparison with the words in the American Heritage Dictionary Corpus, which has over five million words, also verifies that a <u>basic Esperanto vocabulary of about 850 roots is able to do the work of the 6000 highest frequency words which account for 90 percent of all written English in the world.</u>

Apple Computer installed an 800 word vocabulary into its latest notebook computer which it claims reads most common communication.

The international organization Children Around the World uses a textbook by Charlotte Kohrs which uses a vocabulary of basic Esperanto.

Researchers such as Gates, Horn, Rinsland, Greene, Loomer, Harris, and Jacobson, have found that in general students, from elementary to college, use the same high frequency words. The basic Esperanto vocabulary uses these most needed high-utility words.

Research on conversations by Tisljar using International Language found that for common conversations, only 786 morphemes covered 98 percent of the total corpus.

COMPARING LANGUAGES

Results of a university masters project of scientifically surveying most of the world's languages to find which one is best to be taught in schools around the world follows.

A scientifically designed test instrument was developed with criteria for a suitable international language and with an empirically verifiable section proving learning difficulty and suitability. It had a total of 104 questions. Over 1300 languages were scientifically screened by asking 60 questions such as: Is there information available about that language; Has it spread out of its tribal area; does it have a writing system, has it been proven suitable for all uses; is it found in many countries, are helping groups available; is it neutral, is it likable enough that people want to learn it on their own; are there publications in that language; if adopted will it help end language discrimination, are text books available, are there many international words in this language; is the vocabulary sufficiently developed for professional people; is the writing phonetic; is the writing, structure and grammar easy enough for elementary school use; can fluency be achieved in less than 4 years by an average person; is it free of: irregularities, exceptions, unnecessary inflections, genders, irregular accents, excess characters, difficult sounds, useless letters, tones, excess idioms, sexual bias.

The languages that achieved the highest scores were then subjected to 44 more questions which scientifically empirically showed each languages' difficulty level. This was achieved by counting the number of facts to be memorized such as total number of genders, verb inflections, adjective inflections etc.

The average suitability score for all languages was four. The Best candidate Esperanto tested out at 92. The closest runner up on this score was English with 32.

In Global Awareness (considered as the number of countries where the language is currently written) the best candidate was again Esperanto with a score of 113. The closest runner up was English with 50. Note, if global awareness was accessed from the point of view of how many actual countries pen pals were available from, Esperanto would score 84 and English about 12.

The empirically verifiable level of difficulty shows how difficult a language is to learn. For this the lowest score is the most desirable.

RESULTS OF RESEARCH

The **results of research** into the suitability and difficulty of languages were astounding. It should be noted that <u>one language scored so much above all of the others that it stood out scientifically and empirically as the easiest and best.</u>

No other language, not even English, is even close to it. The questions used in the study provide an empirically verifiable level of difficulty showing how difficult a language is to learn. The language easiest to learn and use was basic Esperanto (A SCIENTIFICALLY DEVELOPED VOCABULARY OF HIGHEST UTILITY WORDS using international words, 70 percent English) which tested out at only 1224 memorization units. The full International Language (also known as Esperanto) tested out at 12,000 memorization units for average adult understanding. The next closest candidates were Malay with 40,000; Burmese with 64,000; and English with 122,520. The Average difficulty of languages evaluated was 201,000 memorization units. That means that the average language was about 200 times as difficult as the easiest. The most difficult languages had over 1000 times more memorizations than the most efficient. The figure in the middle is the number of memorization units needed for 90-100 percent understanding.

Name	Suitab	ility	Difficulty	7	Number	of Coun	tries
(higher is bette	er)	(Lov	wer is better)				with pen pals
basic Esperant	to	92			1,224.	116	
Esperanto	92		12,000.		116		
English		32			122,520.	50	
Albanian	7		947,000.		1		
Arabic	16		338,000.		16		
Basque		8			778,000.	2	
Bengali		10			231,000.	4	
Bohemian Cze	ech 12		1,558,000.		1		
Bulgarian	7		588,000.		5		
Burmese	9		66,000.		1		
Byelorussian	8		796,000.		2		
Cantonese	24		605,000.		2		
Chinese		24	ŕ		605,000.	5	
Czech	12		1,558,000.		1		
Danish	8		260,000.		3		
Dutch	9		490,000.		3		
Estonian	11		299,000.		3		
Finnish		13	,		951,000.	2	
French	17		1,243,000.		40		
German		24	, -,		573,000.	12	
Gouyu	24		605,000.		1		
Greek	11		1,830,000.		4		
Hindi	12		142,000.		6		
Hindustani	12		142,000.		6		
Hungarian	8		734,000.		3		
Icelandic	10		1,249,000.		1		
Irish	8		924,000.		1		
Italian	11		451,000.		8		
Japanese	9		1,557,000.		3		
Korean	11		4,042,000.		5		
Latin	12		1,139,000.		0		
Lithuanian	6		1,133,000.		3		
Luxemburgian			573,000.		1		
Malay	15		40,000.		6		
Mandarin	24		605,000.		5		
Old Bulgarian			1,847,000.		5		
Persian	9		582,000.		2		
Polish	11		647,000.		3		
Portuguese	12		464,000.		3		
Rumanian	6		1,472,000.		3		
Russian	O	18	1,172,000.		902,000.	15	
Serbian		6			880,000.	4	
Siamese		2			62,000.	1	
Slavonic	6	2	1,883,000.		1	1	
Slovak	6		550,000.		5		
Slovene	U	7	550,000.		526,000.	2	
Sorbian		7			1,462,000.		
Spanish		20			897,000.	20	
Swedish		8			157,000.	3	
S W CUISII		U			157,000.	5	

Ukrainian	7	736,000.	3
Urdu	12	142,000.	3
Welsh	5	854,000.	1
Wu	24	605,000.	1

Languages not shown had a suitability score of four or less or information was unavailable.

Fluency in English requires nearly ten times the memorization facts required for Esperanto. This makes Esperanto from 3.3 to 300 times easier to learn than other languages and 10 times easier to learn than English. For English speakers it is even easier because 60-70 percent of Esperanto vocabulary is similar to an English word with a similar meaning. How does this compare with other researchers? Per Thorndike, Esperanto is four times easier. Per Sherwood, five to ten times easier. Per The California Esperanto Education Commission, five times easier. Per The World Almanac, five to twenty times easier. Per Janton, eight times easier than French.

HOW TO VERIFY SUITABILITY AND DIFFICULTY OF LANGUAGES

The following is a method to verify the suitability of any language as a candidate to be the international language.

Questions 1-60 are to be answered yes or no. For scoring give 1 point for a yes, 0 points for a no. Unknown answers leave blank.

The total gives an approximate score of suitability. Questions 61 through 103 are totals of facts to be memorized. Number 104 is the grand total of facts to be memorized for fluency for the first seven years of schooling. Question 105 gives the direct global awareness score for teachers. Question 108 yields a standard measure of the grand total of memorizations needed for full adult fluency. Numbers 104 and 108 could be considered difficulty levels. However there is at least one more extremely important factor which is the similarity to the learners own language particularly to the word stock. For example, English, Spanish, and French readers can recognize about 50-70 percent of the Esperanto words in an Esperanto dictionary. This makes learning Esperanto much easier than learning Chinese. Additional empirical quantifications may be made by comparing similarities. These items are questions 109-110. Question 111 is any other factors not covered in 61-111. Number 112 is the Grand level of learning difficulty.

THE OUESTIONS IN DETAIL

- 1. Does the language have enough of a following so books are written about it? If a language is so inconspicuous that there is little or nothing written about it, then it is highly unlikely that it would be a practical candidate for the ideal international language to be taught in the elementary school. And where would one obtain textbooks dictionaries etc. Most of the languages of the world do not even have writing systems, textbooks and dictionaries to several major languages that are available to the public.
- 2. Has it spread out of its tribal area? A candidate for the international language would have to have been good enough to have spread out of its tribal area. Others would have noticed its worth and spread it. Most of the languages of the world have not spread out of their local area.
- 3. Have non native speakers found it suitable for all uses? Since many people are biased with regard to their own native language, it is better if the language is looked at by a non native speaker.
- 4. Is the language distributed in many countries so that there would be at least a base for international teaching of it? To be practical this would have to be the case.
- 5. Are there national, local, and international groups that can help the classroom teacher if needed?
- 6. Is the language neutral? No one wants to have someone's culture or politics forced upon them. Many Americans would resent having to learn Russian. People in many countries

resent being told that they have to learn English. "The big obstacle is the opposition of speakers of other tongues . . . There is a vast difference between studying a foreign tongue so as to be able to use it, and accepting it as an international medium of communications in preference to your own. Since a national language is the vehicle and mouthpiece of a national culture the citizens of each nation hesitate to place themselves at a cultural disadvantage vis-a-vis another group. This is perhaps the main reason why so many citizens of small nations prefer 'neutral' Esperanto, which belongs to no nation or culture in particular and requires a commensurate effort on the part of every learner. (This point of view was perhaps best expressed by Ali Gerad Jama, Minister of Education of Somalia, in these words: 'It is humiliating for small nations to be obliged to learn the languages of the large. Only a neutral language like Esperanto can eliminate that cultural dependency')" (Pei).

- 7. Do people find the language likeable enough to learn it on their own? The human test is most important. If people don't like it they will resist learning it.
- 8. Is the language practical for world use in elementary classrooms? Are there publications in this language which elementary children can read and use? If the kids learn it, can they do anything with it, such as write to pen pals around the world? Are there people in other countries who speak it. Will it promote global awareness in the elementary school? Is it unethnocentric, unnationalistic, free of religious and political implications, and free of any factors that would cause it to be unpractical. This is a general test. Edward Sapir renowned language expert states "A common creation demands a common sacrifice, and perhaps not the least potent argument in favor of a constructed international language is the fact that it is equally foreign, or apparently so, to the traditions of all nationalities. The common difficulty gives it an impersonal character and silences the resentment that is born of rivalry. English, once accepted as an international language, is no more secure than French has proved to be as the one and only accepted language of diplomacy or as Latin has proved to be as the international language of science. Both French and Latin are involved with nationalistic and religious implications which could not be entirely shaken off, and so while they seemed for a long time to have solved the international language problem up to a certain point, they did not really do so in spirit. English would probably fare no better, and it is even likely that the tradition of trade, finance, and superficial practicality in general that attaches to English may, in the long run, prove more of a hindrance than a help to the unreserved acceptance of English as an adequate means of international expression" (Mandelbaum, 1968,113). Another expert on languages Dr. Mario Pei Professor of Romance Philology at Columbia University states "The world language should be a language for the world...not restricted to any nation or group of nations, or to any social, cultural, or professional group. It should not be a device for the reading of scientific or learned papers, read and understood with difficulty by a polyglot audience, but rather a common tongue, used with absolute ease and fluency by everybody, spoken and written with the same ease with which the bulk of the population of any civilized land today speaks and writes its own language...its proper function...is to supply an absolutely free means of communication and interchange of ideas among all of the world's people, whatever their station in life" (Pei, 183).
- 9. Will the language help end language discrimination? Millions of people have been forced to learn another national language other than their own. This is language discrimination. The native speaker of that national language is given a big advantage over the non native speaker. This causes resentment and embar rassment because people are not put on even footing. When a mistake is made the non native speaker becomes the butt of jokes, fun, or ridicule. Along with the national language one has to learn the customs, culture, idioms even religious and ethnic beliefs and practices of the culture of that national language. Often people resent being forced to participate in another culture other than their own. Cultural imperialism can be charged for any national language.
- 10. Does the language have a writing system? A language without a writing system would

not be practical.

- 11. Are there text books published about this language? To be used at all there would have to be a learning text at least for teacher use.
- 12. Are there technical books published in this language? A language without any technical books would be worthless.
- 13. Are there poetry books published in this language? Is the language capable of having good poetry. If so there would be poetry books.
- 14. Are there reading books published in this language? To learn the language students would have to have reading books.
- 15. Are most of the words spelled phonically?
- 16. Is the estimated minimum time necessary for the average human to become fluent in it to a level of fourth grade competency less than four years? If the language is so difficult that it can not it be learned as a second language in this time frame it would not be practical.
- 17. Does the language include international words making it easier to learn? Rutherford notes that "learning takes place more quickly, and what is learned is retained for a longer period of time when that which is to be learned relates directly to something which is already part of the learners knowledge" (1976,138). Having international words makes the language not only easier to learn but people learn many words from other languages as well.
- 18. Is the vocabulary sufficient for use by professional people? This is absolutely necessary for the language to be practical. Many languages are not sufficiently developed to include terms necessary for professional communication which is a necessity. Example does the language have words for **transistor**, **software**, **compact disk**, **interface**, **mouse**, **floppy diskette**, **floppy drive**, **CPU**, **VDU**, **stereo**, **aids**, **communications satellite**, **laser**, **cybernetics**, **etc.** It would take considerable time and labor. . . . to create the needed modern terminology. . . . [for a language that doesn't have it]. . . . One of the reasons why many speakers of Hindi and Arabic prefer to use English or French for scientific purposes is that the terminology is already there in English and French, while it is still being painfully elaborated in their own native tongues (Pei).
- 19. Is the language clear enough for international radio communication? Some languages such as the click languages are not clear enough for use by aircraft, ships, and spacecraft. Communication is the main job of any language and if it can't do that clearly and well it should be ruled out. Several languages are not clear sounding with clashing consonants and sounds not well reproduced over busy communications channels.
- 20. Does the writing system correspond to the phonics? Writing is really the sounds of a language put into written form. Anything other than letters corresponding to the sounds would be ludicrous, unnecessary, inefficient and a hindrance to learning.
- 21. Does the language have a writing system easy enough for elementary instruction? This language will be taught in the elementary schools of the world.
- 22. Does the language have a phonic system easy enough for elementary schools?
- 23. Does the language have a simple enough structure for elementary school use?
- 24. Is the language suitable for machine translation? The ideal international language would have to not be ambiguous. The international language should be capable of being the intermediate media in a machine language translation operation. Machine language translation is becoming a multi million dollar business and soon a business necessity.
- 25. Is the language suitable for international correspondence and are pen pals available in many countries?
- 26. Is there an authoritative body to monitor all proposals for new forms to standardize the language and insure that there should be no dialectal variation, in order to avoid the risk of reduced intelligibility.

The following questions survey the potential candidate for difficulty. This does not mean that a few no answers disqualifies the language rather just shows that the language is more

difficult in that area.

- 27. Is the language free of irregularities?
- 28. Is the language free of exceptions?
- 29. Is the language free of unnecessary inflections?
- 30. Are all the verb forms regular?
- 31. Is the language free of unnecessary verb inflections?
- 32. Is the language free of the necessity of learning genders?
- 33. Is the language free of unnecessary noun inflections?
- 34. Is the language free of unnecessary adjective inflections?
- 35. Is the language free of unnecessary pronoun inflections?
- 36. Is the language free of unnecessary article declensions?
- 37. Is the language free of unnecessary adverb inflections?
- 38. Is the language free of irregular accentuation?
- 39. Is it free of excessive characters to be learned in the alphabet?
- 40. Is the alphabet free of complex or difficult to learn characters?
- 41. Is the sound system free of difficult sounds?
- 42. Is the sound system regular? (one sound per character)
- 43. Is the writing system free of useless letters?
- 44. Do the words sound exactly as they are spelled?
- 45. Is there a universal opposite to save memorization?
- 46. Are there many affixes to cut down on memorization?
- 47. Are grammar rules simple?
- 48. Is the language free of excessive grammar rules?
- 49. Is the language free of many grammar rule exceptions?
- 50. Is the language free of difficult tonal systems?
- 51. Is the language free of sexual bias?
- 52. Is the language free of excess idioms to be memorized?
- 53. Is the language free of excess facts to be memorized?
- 54. Is the language translatable easily to other languages?
- 55. Can it easily accommodate translations from most other languages?
- 56. Is the syntax flexible?
- 57. Is the vocabulary free of excessive duplicate words?
- 58. Has it been accepted by the UN?
- 59. Is the language standardized in form?
- 60. Is the language free of any other factors hindering its use?

EASE OF LEARNING is important as it must be easy to learn by **ALL** elementary students, not just the intellectually gifted. Humans come in a very diverse range of mental ability. The ideal international language must be simple enough for all to learn. An international language that was made for intellectuals thereby excluding most of the population of this planet would not be a functioning international language.

Question number 61 is the estimated number of word roots that must be memorized for 97 percent comprehension, 5,000 for elementary and 20,000 for full adult use is used as a basis. Otto Jespersen the famous linguist stated in his book **Language Its Nature Development and Origin** states that school children at age six know about 3000 words and that Swedish peasants know at least 26,000 words (with little to no education at all) (Jespersen, 1964). Russell Stauffer states that it has been estimated that elementary school **children's vocabulary ranges from 2,500 to 12,500** (1969, 142). Jean Temple notes that studies show that school children are exposed to as **many as 88,500** words in school text books printed in school English. She states "Because good students **do** learn vocabularies approaching **88,000** words, it is clear that learning new words from reading is not only possible, but the only

feasible answer for students who must cope with the enormous vocabulary burdens (1986, 28). Gillet notes that third graders can have vocabularies averaging **7425-25,000** words (1986, 26).

Albert J. Harris and Edward R. Sipay, authors of one of the best reading texts state: The average child entered first grade with a knowledge of the meanings of about 2,500 words and increased his vocabulary at a rate of about 1,000 a year...vocabulary would be about **8,500** words in sixth grade...

Dale (1965, 449), an authority on vocabulary research, summarized the best available evidence as follows: 'If we assume that children finish the first grade with an average vocabulary of 3,000 words, it is likely that they will add about 1,000 a year from then on. The average high school senior will know about 14,000 to 15,000 words, the college senior 18,000 to 20.000' (1980, 449).

The above puts the approximate number of words at about 8000. Of course this is for English. How does this compare with other languages. David Crystal in his book The Cambridge Encyclopedia of Language states that languages have major statistical regularities. He quotes the famous linguist George K. Zipf (1902-50) whose best known law shows a constant relationship between the rank of a word in a frequency list and the frequency with which it is used in a text. Zipf stated take any text, count the words, put in decreasing frequency and the first 15 will account for 25 percent of the text, the first 100 words will account for 60 percent of the text, the first 1000 85 percent of the text and the first 4000 will account for 97.5 percent of the text (1987, 87). [Note it has been discovered that Zipf's law is for ethnic languages. With a planned language the number 1000 can be cut down to about half and the number 4000 can be cut by about one quarter.]

How does this correspond to English? The American Heritage Intermediate Corpus contains 86,741 different words found in the 5,088,721 words of running text tokens that were sampled to produce the American Heritage Intermediate Corpus. This Corpus was used to produce The American Heritage Dictionary. Analysis of the lists are as follows.

Since the lists do not indicate the information needed. This researcher had to use a computer to compute the data.

This researcher's computations show that the first 100 most frequent words account for 48.97 percent of the word usage.

The next 100 account for 7.88 percent The next 100 account for 4.359 percent The next 100 account for 2.359 percent The next 100 account for 2.293 percent The next 100 account for 1.906 percent The next 100 account for 1.686 percent The next 100 account for 1.376 percent The next 100 account for 1.277 percent The next 100 account for 1.179 percent The next 100 account for 1.179 percent

The first 1000 words account for 73.905 percent of the words used.

The next 1000 account for only 7.27 percent The next 1000 account for only 3.69 percent

The next 1000 account for only 2.338 percent

The next 1000 account for only 1.695 percent The next 1000 account for only 1.259 percent

The next 1000 account for only 0.010 percent

The next 1000 account for only 0.008 percent

The next 1000 account for only 0.008 percent.

The next 1000 account for only 0.005 percent

Therefore the first 1000 accounts for a total of 73.9 percent

Therefore the first 2000 accounts for a total of 81.1 percent Therefore the first 3000 accounts for a total of 84.8 percent Therefore the first 4000 accounts for a total of 87.2 percent Therefore the first 5000 accounts for a total of 88.9 percent Therefore the first 6000 accounts for a total of 90.1 percent Therefore the first 7000 accounts for a total of 91.1 percent Therefore the first 8000 accounts for a total of 92.0 percent Therefore the first 9000 accounts for a total of 92.6 percent Therefore the first 10000 accounts for a total of 93.2 percent

The above is similar to other word studies.

The difference between this and Zipf's law is explained by the huge number of words in the English language which is now larger by far than any other language. Unfortunately bigger is not better because there are many duplicate and ambiguous words. For example, Guinness indicates that the word "set" has 184 meanings in English. (Guinness 148)

The LOB Corpus (Lancaster-Oslo/Bergan Corpus) is a million-word collection of present-day British English tests using 500 samples or approximately 2,000 words each distributed over 15 text categories. As far as frequency of parts of speech, the LOB Corpus shows approximately Nouns 27 percent, Verbs 22 percent, Determiners 13 percent, Prepositions, 13 percent, Adjectives 8 percent, Adverbs 5 percent, Conjunctions 5.5 percent, Numerals 2 percent. Determiners can be adverbs, or pronouns, such as, "all, let all, that".

The matter of word frequency is important in calculating the difficulty of learning. The student has to first learn the word itself, plus perhaps 96 endings for the verb form, plus 20 additional endings for the noun form, then 36 endings for the adjective form. Plus, if the forms change with gender an additional set of endings must be learned. To come up with an empirically verifiable figure then the number of verbs and nouns must be known to calculate the total number of individual facts that must be memorized.

This needed to be explored because when the actual word list which was based on real life testing was compared to a straight vocabulary study such as theirs one could see that their figures were different. Their figures are based on their definitions of words, and for the entire language. What was needed was data based on the actual words the young people will have to learn. Not finding any data on this, this researcher had to do his own study. To determine the difficulty level involved with learning a language one needed to find out how many word forms had to be learned for 5000 thousand words. The following data is the result or this study.

For the thousand listed below there are the following order.

Nouns	verbs	adject	ives	adverbs	pronouns	prepositions	other	
618	523	490		92	81	46	28	(first 1000)
649	422		533		41	35	5	24 (next 1000)
2032	1276	453	111		86	5	15	(next 3000)
3299	2221	1476	244	1	202	56	67	(total 5000)
66 %	44 %		29 %	5 %	4 %	1 %	1 %	

Of course it adds up to more than 100 percent because many words can be used for several parts of speech and still endings have to be memorized for each in many languages.

Some students have to go over language items many times in order to learn them. Jean Temple notes that programs to teach students new vocabulary require enormous repetition. One program required between 26 and 40 repeated exposures to achieve a learning rate of 86 percent (1986, 28).

Mario Pei states that every (national) language is "laden with idioms" (1949,144). An idiom is an expression that is unique to a particular language. Idioms are an important factor. Richard Spears Ph.D. Professor of Linguistics at NW University lists over 8,000 contemporary American English idioms in his National Text Book Company's American

Idioms Dictionary (1987). He lists 1,500 common idioms in his Essential American Idioms. Frederic Wood lists about 1,200 verbal idioms alone (1964). Adam Makkai Ph.D. Professor of Linguistics at the University of Illinois lists 5000 idioms in his Dictionary and lists 2,500 "commonly used idioms" in his idiom handbook (1984, 1987). Tan Hay Pang states that there are a few thousand Idioms in Chinese and that most school children learn about 250 (1986). Many books on many languages show 2000-3,600 common idioms.

There are numerous bits of commonly used language, for example, that are seldom if ever touched upon in textbooks. One whole such area is that of the so-called extra-sententials, that vast collection of syntactic forms of many varieties which, in linguistic terms never form a constituent with the sentences to which they are attached, yet are indispensable for communicative precision and for the natural-sounding give-and-take of discourse. (Rutherford, 1976,157)

Question 62 is the total number of genders that must be memorized.

- 63. The estimated number of words for which genders must be memorized. The estimated figure for the number of nouns in the language in 5000 words which is roughly 3000. He can state that because he actually counted over 3000 nouns in the first 5000 most common words. Of course by definition one can state that a language has no nouns but in practice a name for an object is a noun and still has to be learned. These are units of memorization not just linguistic definitions of words.
- 64. The total number of genders that must be memorized. This is question 62 times 3000.
- 65. The total number of noun inflections that must be memorized for each individual noun.
- 66. The estimated number of nouns for which inflections must be memorized which is 3000.
- 67. The total number of noun inflections that must be memorized which is question 65 times 3000.
- 68. The number of verb inflections that must be memorized per verb.
- 69. The estimated number of verbs. Which is 2000 as the 5000 most common words there are about 2000 verbs.
- 70. The total number of verb inflections that must be memorized is question 69 times 2000.
- 71. The number of adjective inflections that must be memorized.
- 72. The estimated number of adjectives. This researcher counted 1476 and will use the rounded figure of 1400.
- 73. The total number of adjective inflections that must be memorized which is question 72 times 1400.
- 74. The number of pronoun inflections that must be memorized based on the individual count for that particular language.
- 75. The estimated number of pronouns in the most common 5000 words of the language. This researcher's count was over 200 so the rounded figure 200 was used.
- 76. The total number of pronoun inflections must be memorized which is question 74 times 200.
- 77. The number of article declensions.
- 78. The total number of articles in the language.
- 79. The total number of article declensions, question 77 times 79.
- 80. The number of adverb inflections based on actual count.
- 81. The estimated number of adverbs.
- 82. The total number of adverb inflections that must be memorized.
- 83. is how many different characters are in the writing system.
- 84. The number of excessive characters to be learned in the alphabet. Note there is a difference in number of characters needed to be memorized and the number of "letters" in the alphabet.
- 85. The number of complex characters in that particular language by actual count. A complex character is defined as any letter that takes more than 6 strokes.

- 86. How many sounds must be learned.
- 87. How many characters have more than one sound per character.
- 88. The number of words with irregular accentuation.
- 89. The total number of words not spelled phonetically and regularly.
- 90. Whether the language has a universal opposite affix or word which creates the opposite meaning and works with most words in the language and which thereby reduces memorization of opposite words.
- 91. The number of opposites in a language. There are about 1500 opposites in the base of 5000 words.
- 92. The total number of opposites that need not be memorized. If the language has a universal opposite 750 would not have to be memorized.
- 93. The other affixes or words that cut down memorization?
- 94. The estimated savings in memorization from 93.
- 95. The total number of grammar rules that must be learned.
- 96. The total number of exceptions to rules of grammar that must be memorized.
- 97. The number of tones to be memorized.
- 98. The total number of words for which tones must be memorized.
- 99. The total number of additional memorizations needed for tones.
- 100. The estimated number of idioms. Just knowing the meaning of each word does not suffice: "up the creek, on the lamb, on duty, take a gander, take a licking, take a powder, take a hike, take up room, kick the bucket, break wind". Most languages have thousands of idioms

Question 101 is the total number of variations of the language's standardized form that must be memorized.

- 102. The estimated number of duplicate words. In English for example there are hundreds of duplicate words. (auto, car)
- 103. The total number of other facts that must be memorized. Multiple meanings for the same word. Example the word "set" in English has nearly 200 meanings. In English there are also a couple hundred "troublesome words" that require extra attention of the learner such as lie, lay lie. Even native English speakers often misuse these. Also there are over 130 irregular plurals. There are also contractions, abbreviations, classifier words and special grammar oddities such as homonyms.

Ouestion 104 is the grand total number of facts that must be memorized.

- 105. What is the number of countries pen pals are available from using this language.
- 106. What is the total number of countries helpers are available from who could help the learner.
- 107. What is the number of countries which have speakers of this language.
- 108. Question number 104 times four gives a standard figure of total memorizations needed for full adult fluency.
- 109. Total number of word roots which are dissimilar to the language of the learner.
- 110. Total other facts to be that need to be memorized that are dissimilar to the native language of the learner.
- 111. Any other factors or facts not included in the above.
- 112. The Grand Grand total of 62 thru 103 and 108 thru 111.

Here are the results question by question for Esperanto.

- 1. Does the language have enough of a following so books are written about it? Yes, in fact, there are thousands of books about this language. "Esperanto is the only living international language; it has a worldwide body of speakers, a large literature, regular use at international conferences, and textbooks in 54 languages." (Encyclopedia International, 1978,353) "More than 30,000 books have been published in Esperanto" (Hoffman, 1990,142).
- 2. Has it spread out of its tribal area? Yes. It has spread to over 100 countries. The annual

yearbook of the Universal Esperanto Association lists members in over 100 countries. In the 1970's Esperanto was taught in over 600 schools and 31 universities. President Franz Jonas of Austria, himself speaking Esperanto opened the 55th World Esperanto Congress in Vienna in 1970... In 1987...6000 delegates from 70 countries (Hoffman, 1990,143) attended a convention and even though over they were from all over the world not one translator was needed. The fact that this language has become one of the major living languages of the world in spite of no nation or major political group promoting it, and that it has continued to grow in spite of the genocide (Hoffman, 1990; Heller, 1985; Boulton, 1960) of its speakers on a massive scale in several countries, is remarkable. One of this researchers pen pals has possibly been murdered in Haiti. His only crime was writing in a language the regime did not understand.

- 3. Have non native speakers found it suitable for all uses? Yes, and these nonnative speakers are from over 100 countries. This researcher has spoken directly with and/or corresponded with people from over 70 countries who express their satisfaction with Esperanto as a complete fully useful language. 4. Is the language distributed in many countries? Yes in over 100 countries. Encyclopedia Americana states "30 universities and colleges offered courses in Esperanto, and it was being taught to approximately 16,500 primary and secondary school pupils in over 30 countries" (1991, 583) "Esperanto is the most widely used international language. People in about 90 countries speak Esperanto" (World Book Encyclopedia, 1990). English however is the most widespread (McFarian, 1990,119). Note English is a national language spoken internationally.
- 5. Are there national, local and international groups that can help? Yes there are national groups in most countries, local groups in many countries. The Universal Esperanto Association is headquartered in Europe (Rotterdam, Netherlands) with offices in Switzerland and elsewhere.
- 6. Is the language neutral? Yes one of the very few that are.
- 7. Do people find the language likeable enough to learn it on their own? Yes In fact most speakers liked it so much they are self taught. This language is growing at the grass roots level by people who fell in love with it, learn it out of a teach yourself text books and then tell others about it. In all of The reading this researcher has done there was no other language that can rival this unique phenomenon.
- 8. Is the language practical for world use? (unethnocentric, current periodicals, etc.) Yes. "There are over 110 periodicals in regular publication" (Encyclopedia Americana, 1991,583). This researcher has corresponded in Esperanto with over 200 people from many diverse countries, ages and occupations. This researcher simply ran two line ad in a magazine named Esperanto and a magazine from China. These have resulted in more correspondents than he has time to write to. "Approximately 8,000,000 people throughout the world speak Esperanto" (Groiler International, 1980,194). Mario Pei noted linguistic authority stated 10,000,000 (Pei, 1969). The World Almanac which is very conservative gives two million speakers (Culbert, 1990). However one of the beauties of this language is that one does not have to learn how to speak it to use it. The average person can learn enough in part time study in a few months to be able correspond with people in over 100 countries. This researcher has talked to teachers who said that their students were corresponding with classes in other countries after only a few weeks of study. This researcher has had letters from young students in many other countries who were just beginners in learning the language. This researcher did not find this with any other language. In all other languages it appears that it takes much longer often several years before average students can correspond with people in other countries.
- 9. Will the language help end language discrimination? Yes. This language puts people on equal footing. See comments in review of literature.
- 10. Does the language have a writing system? Yes. Same as English but with a ^ over 6

letters roughly equivalent to adding an h after the letter.

- 11. Are there text books published about this language? Yes. see remarks above. "Books in and about Esperanto number over 8,600 and there are approximately 145 Esperanto periodicals. Examples of the world's great literature have been translated into Esperanto and original works of fiction and poetry have been written in the language" (Groiller Universal Encyclopedia, 1968, 204).
- 12. Are there technical books published in this language? Yes. "Literature in Esperanto includes poetry, novels, and plays...works of modern authors...works in Esperanto are being produced at the rate of a little over one a week" (Encyclopedia Americana, 1988, 583). See remarks in review of literature as to publishing.
- 13. Are there poetry books published in this language? Yes and they are from many nations and cultures which reflects the internationality of this language.
- 14. Are there reading books published in this language? Yes and they are from many countries. "it has an extensive literature" (Colliers Encyclopedia, 1983). The current Catalog of the Universal Esperanto Association. lists over 3000 of the best which anyone can obtain by mail from any country in the world.
- 15. Are most words spelled phonically? Yes.
- 16. Is the Estimated minimum time necessary for the average human to become fluent in it to a level of fourth grade competency less than four years? Yes many people learn it in under a year. Edward Thorndike a very noted educational scholar found that it can be learned in at least one quarter of the time of other languages (Harvard, 1967). Other linguists have given estimates that it can be learned in as much as one twentieth the time.

Controlled experiments show that because of its logical structure, phonemic spelling, and regular grammar Esperanto can be learned to a given criterion of performance in from one-twentieth to one-fifth the time needed for the learning of a typical national language (Hoffman, 1990, 805).

Pei stated that one can learn the grammar in under an hour (1958). Which is true as this researcher did it. There are accounts of persons learning it to fluency in less than a month. 17. Does the language include international words making it easier to learn? Yes In fact the major basis for new words is their internationality. The name of the language really is "Lingvo Internacia" (Language International). There are in the world's 5000 languages the problem is that for old words there is for example 5000 different words each for "help, orange, hotel, telephone, international". Some languages don't even have a word for "orange". In Esperanto the root words for those things are "help, oran_, hotel, telefon, internacia" The old words in Esperanto were created from the most important languages of the time which were the languages of Western Europe. (The Indo-European language group from which these international words were based still covers about half of the world's populated area and about half of the world's population speaks languages in this group.) They were picked for clarity and functionality as an easy to learn second language for international use.

18. Is the vocabulary sufficient for use by professional people? Yes.

There are Esperanto organizations for such professionals as doctors, lawyers, and scientists, many of whom, publish studies in the language. Many tourist brochures are printed in Esperanto and government agencies in Hungary, West Germany, mainland China, Bulgaria, and Spain, among others, publish Esperanto magazines or books about their countries (Encyclopedia Americana, 1988, 583). There are at least "22 professional associations that use Esperanto" (Britannica, 1980, 560).

19. Is the language clear enough for international radio communication? Yes. In fact it was one of the few languages that was declared suitable for international telegrams back in the days when radio reception was poor. "Some corporations with international sales advertise in Esperanto, and 19 radio stations broadcast regularly in the language" (Encyclopedia

Americana, 1988, 583). This researcher picked up Bern Radio Switzerland broadcasting in Esperanto on his shortwave radio just last week.

- 20. Does the writing system correspond to the phonics? Yes exactly.
- 21. Does the language have a writing system easy enough for elementary instruction? Yes. See remarks about elementary students in California schools and other remarks in review of Literature. This researcher found that many kids like to write down a few sentences in Esperanto because to them it is fun and since it is so similar to English they can write and speak sentences in a foreign language almost immediately. It actually turns many kids on to language. It even gives then a secret language to communicate with to some of their friends. Many kids have asked this teacher for addresses of pen pals in other countries.
- 22. Does the language have a phonic system easy enough for elementary schools? Yes.
- 23. Does the language have a simple enough structure for elementary school? Yes. Esperanto is considered easier to master than any national tongue, for its grammar rules are consistent, and a relatively small number of basic roots can be expanded into an extensive vocabulary by means of numerous prefixes and suffixes. The French Academy of Sciences has called Esperanto 'a masterpiece of logic and simplicity' (Groiller Universal Encyclopedia, 1968, 204). This researcher has taught the entire past, present and future forms to several classes of elementary and also to adults in under five minutes as a substitute teacher just for fun for the kids. Since This researcher also taught an English as a Second Language class for several years he can state that neither this researcher nor any other teacher has been able to teach students the English equivalent even after many semesters of teaching at four hours a day.
- 24. Is the language suitable for machine translation? Yes. In fact it is now being used for machine translation. See Review of Literature.
- 25. Is the language suitable for international correspondence? Yes. As a matter of Fact this researcher can produce about 600 letters this researcher has received from around the world. He can understand them as long as the writer had legible handwriting. See comments at question eight.
- 26. Is there an authoritative body to monitor proposals for new forms to standardize the language? Yes. There is an international language committee which approves suggested words and helps keep the language standardized.
- 27. Is the language free of irregularities? Yes. It may be the only living language that is.
- 28. Is the language free of exceptions? Yes and it may be the only living language that is also.
- 29. Is the language free of unnecessary inflections? Yes.
- 30. Are all the verb forms regular? Yes. Not only are they all regular but there are no exceptions to memorize. The Guinness Book of Records shows that this language holds the record for the least irregular verbs none (Guinness 147).
- 31. Is the language free of unnecessary verb inflections? Yes. In fact unless one counts the single ending there are none.
- 32. Is the language free of the necessity of learning genders? Yes. There are no genders to learn
- 33. Is the language free of unnecessary noun inflections? Yes. None.
- 34. Is the language free of unnecessary adjective inflections? Yes.
- 35. Is the language free of unnecessary pronoun inflections? Yes.
- 36. Is the language free of unnecessary article declensions? Yes.
- 37. Is the language free of unnecessary adverb inflections? Yes.
- 38. Is the language free of irregular accentuation? Yes. In fact it is completely regular.
- 39. Is it free of excessive characters to be learned in the alphabet? Yes.
- 40. Is the alphabet free of complex or difficult to learn characters? Yes.
- 41. Is the sound system free of difficult sounds? Yes.

- 42. Is the sound system regular? (one sound per character) Yes.
- 43. Is the writing system free of useless letters? Yes.
- 44. Do the words sound exactly as they are spelled? Yes. One of the most dreaded tasks is learning to write and especially to spell in another language. This teachers English as a Second Language students must struggle over hundreds of words that are not spelled the way they sound. "knee, knife", etc. I have read in more than one source that about half of all English words are not spelled phonetically.
- 45. Is there a universal opposite to save memorization? Yes. This saves memorizing at least 750 vocabulary words plus a tremendous amount of time in speaking because all one has to do is put "mal" in front of any word and that creates the opposite word which in the long run results in a savings of thousands of words one does not have to memorize.
- 46. Are there many affixes to cut down on memorization? Yes. "There is an extensive set of suffixes that can be added to word roots to allow various shade of meaning or newly derived forms" (Britannica 560, 560). The count in a 15,000 word pocket dictionary found 1221 words using affixes which was 15 percent. Since the vocabulary was limited in this dictionary because of space it is quite possible that affixes in this language could provide as much as a 25 percent memorization savings to adult speakers.
- 47. Are grammar rules simple? Yes. In fact there only 16 basic rules.
- 48. Is the language free of excessive grammar rules? Yes.
- 49. Is the language free of many grammar rule exceptions? Yes. English and many other languages have hundreds of exceptions that need to be memorized. Exceptions are frustrating. Especially the spelling rules.
- 50. Is the language free of difficult tonal systems? Yes.
- 51. Is the language free of sexual bias? Yes.
- 52. Is the language free of excess idioms that need to be memorized? Yes. Many languages have many idioms that must be memorized for understanding in addition to just vocabulary.
- 53. Is the language free of excess facts to be memorized? Yes. Some languages have additional facts that have to be memorized not covered in the above questions. In the review of literature are the definitions of the types of languages for which this question helps to evaluate.
- 54. Is the language translatable easily to other languages? Yes.
- 55. Can it easily accommodate translations from most other languages?
- 56. Is the syntax flexible? Yes. The syntax is extremely flexible.
- 57. Is the vocabulary free of excessive duplicate words? Yes This researcher compared Esperanto to English and found that there are very few duplicate words in Esperanto. However in English there are thousands of duplicate words which create a nightmare for anyone learning English. Guinness states for Example that the word "inebriated" has 2,241 synonyms (McFarian, 1990, 144). This researcher's English as a Second Language students were often befuddled by so many duplicate words for the same thing or idea. Of course the ambiguity of many English words is an even more difficult barrier. The word "set" in English has about 184 meanings. The World Almanac lists on page 808 64 English words meaning a group of, and 45 words in English that all meant the young of animals. In Esperanto the one suffix "op" connotes the meaning group of to any fitting word and one suffix "id" added to a any fitting word connotes the meaning young. One could infer from this that there are many memorizations that can be eliminated for the person studying Esperanto. This researcher feels homophones should also be counted. English has many which cause much confusion such as "to, two, too, or aie are, ayer, ayr err, e're, ayre, ere, eyre and heir." My English as a Second Language students are frustrated by these. Esperanto has to my knowledge none.
- 58. Has it been accepted by the UN? Yes. See Review of Literature. (In fact this researcher discovered that the United Nations has passed a resolution that states that Esperanto should

be encouraged and taught in all countries of the world. The UN has official consultative relations with the Universal Esperanto Association which now has an office in the UN complex in New York.)

- 59. Is the language standardized in form? Yes.
- 60. Is the language free of any other factors hindering its use? Yes.

EASE OF LEARNING is important as it must be easy to learn by all elementary students not just the intellectually gifted. The following yields an empirically verifiable measure of learning difficulty. FOR A LEVEL OF FLUENCY SUFFICIENT FOR THE USUAL CLASSROOM COMMUNICATION IN A 6TH GRADE CLASSROOM:

- 61. Estimated number of word roots that must be memorized for 97 percent comprehension? 5000
- 62. Number of genders that must be memorized. 0
- 63. Estimated number of words for which genders must be memorized? 0
- 64. Total number of genders must be memorized? 62*63 0
- 65. Number of noun inflections that must be memorized? 0
- 66. Estimated number of nouns for which inflections must be memorized? 0
- 67. Total number of noun inflections that must be memorized? 65*66 0
- 68. Number of verb inflections that must be memorized? 0
- 69. Estimated number of verbs 2000
- 70. Total number of verb inflections that must be memorized? 69*68 0
- 71. Number of adjective inflections that must be memorized? 0
- 72. Estimated number of adjectives. 1400
- 73. Total number of adjective inflections that must be memorized. 72*71 0
- 74. Number of pronoun inflections must be memorized? 0
- 75. Estimated number of pronouns. 200
- 76. Total number of pronoun inflections must be memorized? 0
- 77. Number of article declensions. 0
- 78. Total number of articles. 1
- 79. Total number of article declensions. 77*79 0
- 80. Number of adverb inflections. 0
- 81. Estimated number of adverbs, 200
- 82. Total number of adverb inflections that must be memorized? 0
- 83. How many different characters are in the writing system? There are 28 letters. This is multiplied by four because there are four sets of characters one has to learn to use with the Roman alphabet. (lower case printing, upper case printing, lower case writing, upper case writing) this gives 112 plus 8 common symbols (.,?!"-;:) total 120.
- 84. Number of excessive characters to be learned in the alphabet? 0
- 85. Number of complex characters? 0
- 86. How many sounds must be learned? 32
- 87. How many characters have more than one sound per character? 0
- 88. Number of words with irregular accentuation? 0
- 89. Total number of words not spelled phonetically and regularly? 0
- 90. Universal opposite affix or word? Yes.
- 91. Number of opposites. 1500 See above remarks.
- 92. Total number of opposites that need not be memorized. -750 (For this language this researcher did an actual count.)
- 93. Other affixes or words that cut down memorization? 100
- 94. Estimated savings in memorization. 750
- 95. How many grammar rules must be learned? 16
- 96. Number of exceptions to rules of grammar? 0
- 97. Tones to be memorized. 0

- 98. Number of words for which tones must be memorized. 0
- 99. Total number of additional memorizations needed for tones. 0 100. Number of idioms that must be memorized? 100.
- 101. Number of variations of the language's standardized form? 0
- 102. Number of duplicate words? 10

IT IS HELPED

- 103. Total number of other facts that must be memorized? 0
- 104. GRAND TOTAL NUMBER OF FACTS THAT MUST BE MEMORIZED? 3028.

Remember this information was based on survey information. Your help in providing better information is greatly appreciated particularly needed are answers to the questions on the following pages for all major languages of the world.

the following pages for all ma	ajor languages of the world.
1. Number of genders	
2. Total number of possible r	noun inflections
	verb inflections per verb
4. Total number of adjective	inflections
5. Total number of possible p	pronoun inflections 6. Total number of possible article
nflections	- -
7. Total number of articles	
8. Total number of possible \overline{a}	adverb inflections
9. Total number of characters	
10. Total number of sounds	-
11. Total characters with mo	re than one sound
12. Percentage of words with	irregular accents
13. Percentage of words not	spelled phonetically
14. Is there one word used as	s a universal opposite?
15. Total number of universal	
16. Total number of exception	
17. Total number of idioms _	
18. Total number of duplicat	
19. Total number of difficult	sounds
20. Is there 1 sound per chara	
21. Are there any silent or ur	
22. Do the words sound exac	etly as spelled
	eated differently in the language
24. Can positions subject and	object be switched without loss of meaning
25. Total number of tones	
26. Total number of words w	ith tones
27. Total number of forms of	f this languageor standardized?
28. Modern scientific vocabu	
29. International words	·
30. Authoritative body $\overline{\text{to sta}}$	ndardize language
Show the entire alphabet.	o
Γranslate the following into the	he language.
ΓHE PEN	THE MAN
ΓHE WOMAN	THE CHILD
ΓHE COMPUTER	COMPUTER SOFTWARE
COMPUTER HARDWARE	I HELP
AM HELPED	YOU (ONE) HELP
YOU ARE HELPED	HE HÈLPS
HE IS HELPED	SHE HELPS
SHE IS HELPED	IT HELPS

WE HELP

WE ARE HELPED YOU (MANY) HELP

YOU ARE HELPED THEY HELP

THEY ARE HELPED I AM HELPING

I AM BEING HELPED I DO HELP
I DO GET HELPED I SHALL HELP
I SHALL BE HELPED I WOULD HELP
I WOULD BE HELPED I HELPED
I WAS HELPED I WAS HELPING

I WAS DELIC HELDED I WAS DELFI

I WAS BEING HELPED I DID HELP

I DID GET HELPED I HAVE HELPED I HAD HELPED

I HAD BEEN HELPED I SHALL HAVE HELPED

I SHALL HAVE BEEN HELPED I WOULD HAVE HELPED

I WOULD HAVE BEEN HELPED HELP!
BE HELPED! IF I HELP
IF I BE HELPED IF I HELPED

IF I WERE HELPED IF I SHOULD HELP

IF I SHOULD BE HELPED THE MAN HIT A MAN WITH A MAN. IT IS THE MAN'S PEN

Dr. Mario Pei professor of language at Columbia University stated: "One of the greatest needs in the world of today is a language spoken and understood by everybody. But this need will be far, far greater in the world of tomorrow, the world of our children and their descendants."...."What would happen if most of the children in the world learned another language along with their own? Not just **another** language, but **the same** language? In thirty years there would be no need for interpreters. Our children could travel around the world and learn the customs and thoughts of other people in foreign lands first hand, easily and naturally."...."A single international language, carefully governed by a single international language academy, would prove an inestimable boon to trade among the nations." "To be effective, the teaching of this language should start in the first grade, side by side with the national language.".... (Pei).

"Esperanto is an artificial language about the same way that an auto is an artificial horse...."

"That language is best which is easiest for the majority".... "Whatever tongue is chosen, natural or constructed, it must be phonetically spelled"...."Zonal Languages are merely a recognition of the status quo and offer no true solution. Combinations of zonal languages-means that people would have to learn several languages....If things are to be done speedily and well, the world's choice will have to fall upon a single language A Gallup poll conducted in small European countries like the Netherlands and Norway showed that **Esperanto was second only to English as the people's choice for an international language**." (Pei)

David Richardson stated "Thousands set out to teach themselves a foreign language few actually succeed, but for the vast majority the task is to great. By contrast a substantial proportion of the Esperanto speakers, world-wide, have learned the language on their own, often from a book.

UNITED NATIONS TRANSLATION

The <u>United Nations now wastes about a third of its budget on translation and interpretation</u>. It is a fact that simultaneous translations are often inaccurate and the vast majority of the translations are unread. The cost of this waste is in the hundreds of millions of dollars. If Esperanto were used most of this money could be used to prevent blindness in children, fight diseases, and make third world farmers independent rather than dependant.

Piron tells how expensive and unproductive translating is in his book *Le defi des langues*. He stated that when the World Health Organization added two working languages Arabic and Chinese that the additional cost of translating these was \$5,000,000 a year. Because of this expense the assembly voted down a carefully devised program that would have improved health and saved lives in third world countries because it would have cost \$4,200,000 because of lack of funds. He adds that many children go blind because of lack of a medicine that costs twelve cents per child per year. This might equal the cost of translating one word into all of the working languages.

The cost of translating one page of text into six languages is over \$100 per page and there are well over 10,000 pages per year. In 1975 the UN translation division had over 500 employees plus 181 interpretation employees at a cost of 21 million dollars (Eichholz 199). In 1976 indirect language services were over 10 million (Eichholz 265). The production of a UN translator averages 5 pages a day (Eichholz 214).

THE HIDDEN AND PERVERSE EFFECTS OF THE CURRENT SYSTEM OF INTERNATIONAL COMMUNICATION

Dr. Sylvan Zaft summarized part of the description of a speech given by The world famous former UN Translator and linguist Claude Piron who spoke in May of 1994 at the International Youth Forum. Parts of Dr. Zaft's summary follows. Piron stated that: Frequent and important errors are the norm when it comes to matters of translation. Some of the perverse effects are: 1. When certain languages are selected for use in international gatherings, all those people who are not fluent in those languages are automatically eliminated. 2. A tremendous amount of misinformation is generated by translations which are incomplete and faulty. 3. Enormous amounts of money are diverted from useful ends to pay to support a small army of translators. 4. Because good technical information is only available in a few, very difficult languages, such as English and French, people in poor countries have to do without that information. This greatly hinders the economic development of those poor countries. 5. Many people are placed in an inferior position because they have to speak in a foreign language that they are not confident in. (Imagine how you would feel if you had to study Japanese for many years and then speak fluently in that language in order to be effective in important international meetings.)

But if Esperanto were universally adopted this would do away with the above. 1. Anyone who spent just one year seriously studying Esperanto could take part in international meetings. 2. There would be no errors of translation because people would be speaking directly to each other. 3. The money paid to support translators would be freed up for productive use. 4. technical information would be available throughout the third world in a language that people could learn in a year. 5. everyone would be speaking in a neutral language that they studied for international use, and so everyone would be operating on a much more equal level.

Additional points made by Piron were: Students can learn Esperanto in a small fraction of the time that they would need to spend studying a foreign language. The reason they can do so is that students of Esperanto can safely rely on their innate reflexes, on the process of "generalizing assimilation". Because students of Esperanto can always safely generalize, they save an extraordinary amount of time. This is why one year of Esperanto is worth a great many years of English or other national language when it comes to effective communication. If Esperanto took the place of former colonial languages, ordinary people could spend a single year studying it and then share in the privileges of the elite who conduct business in languages other than the population. However many members of the elite might not be thrilled by that and will ridicule the idea of using of Esperanto (Zaft, 1994).

LANGUAGE PREJUDICE

There is a lot of prejudice about languages. Renowned linguist Edward Sapir states: that the **speakers of a national language are under profound illusions as to the logical**

character of its structure..."What is needed above all is a language that is as simple, as regular, as logical, as rich, and as creative as possible; a language which starts with a minimum of demands on the learning capacity of the normal individual and can do the maximum amount of work."

Piron and others have stated that people make up many rationalizations against Esperanto which are often unfactual.

OUALIFICATIONS TO BE THE INTERNATIONAL LANGUAGE.

No other language can prove that it has even the following qualifications for being the international language:

1. Esperanto is the easiest language to learn. 2. More people can learn it because of fewer demands on their time for memorization. 3. Esperanto is politically neutral. 4. Esperanto is culturally neutral. 5. All of the verbs are regular. 6. The grammar is the simplest of any language. 7. All people can learn it, not just the intellectually gifted. 8. Esperanto works as a language for scientists and professional people as well as for common people. 9. When people are given the facts it is the people's choice. 10. Esperanto is a major international language with speakers in over 100 countries. 11. Esperanto stops language discrimination. One is no longer forced to learn and use someone else's native language. 12. Esperanto is endorsed by the United Nations Educational, Scientific and Cultural Organization who recommends that it be taught and used in schools all around the world. 13. Helpers around the world are available to help new learners. 14. It has actually proven to be fun to learn and use. 15. It has been scientifically and empirically proven to be the most suitable language for international use.

If Esperanto was picked as the international language everyone would win. Everyone can still keep and use their own native language with all of its richness or communication within their native groups. And Esperanto provides efficient communication between speakers of all languages without discrimination. In **Interlinguistics** Andre Martinet states "I came to the conclusion that, in international contacts, linguistic communication is much easier and more profitable it is carried out in a language which is not the native one of either interlocutor. My conclusion is that the problem of a language for international communication presents itself as the conflict between a planned language, Esperanto, which is known to function to the satisfaction of its users, and a hegemonic national language, which, as we all know, is, today, English...[even the enemies of Esperanto admitted]...'Esperanto, it works!" (Schubert, 1989).

HOW MANY LANGUAGES ARE THERE?

Charles Berlitz states that the number of languages has decreased in the last 100 years from over 10,000 to 2,796 (1982 3). Most languages are spoken by just a few thousand people and are probably headed for extinction.

The current language situation is that there exists great language barriers of over 2000 languages (including about 227 languages with over 1 million speakers). This presents major problems in understanding often resulting in personal loss, misunderstanding and sometimes death

Gyulsa Decsy states that as of 1985 there are 2,800 Native Languages in the world spoken by 4,845 million people (Decsy, 1985). Barbara Grimes lists 6,170 languages and her index lists 33,000 names of languages (Grimes, 1988). Erik Gunnemark estimates there are 5,200 languages and lists 350 in his book (Gillet, 1986). Eugene Nida shows pictures of 1,399 languages that the Bible has been translated into (Nida, 1972).

Charles Berlitz states that parts of the bible has been translated into 1,710 languages (1982, 2). Meritt Ruhlen classifies over 700 languages and indexes 5000 language names (Ruhlen, 1987). Charles Voegelin lists over 25,000 language names (1977). John Wright states that

there are 4,000 to 10,000 languages and 20,000 to 50,000 dialects (1991). Per Charles Berlitz language expert there are 2,796 languages now spoken in the world (1982). Per Guinness the total of languages and dialects is 3,000-5,000, of which 845 come from India (Guinness 146); the language spoken by most people is Mandarin; most widespread English (Guinness 146).

THE CURRENT LANGUAGE SITUATION

The world language situation is truly something of major importance not only to our economic well being but also to the survival of the human race. There are about 3000-5000 languages in current use in the world today (Guinness 146). Well over 200 are major languages with millions of speakers (Culbert, 1990, 808). If a person from one part of the world travels to a much farther away place the chances are that she or he may not be understood. The foreign visitor in many countries is often taken advantage of and ridiculed. If that person has a sudden serious medical problem or other important need to communicate in an emergency situation they are most likely not to be understood because it is a sad fact that most humans on this planet cannot understand most other humans. This could result in loss of life and property. In the United States prior to 1965 one could go hundreds, even thousands of miles in any direction without language problems but this is not true in most other countries where languages change in short distances often under 100 miles. Now in the United states 15 percent of the population does not understand English well. In many areas and cities the percentage is much higher in the order of 30-60 percent.

The following statistics taken from the World Almanac and other sources show the <u>TOTAL</u> <u>SPEAKERS</u> IN THE WORLD. This includes Native and non native. FLUENT IN, millions, (and percent of world)

CHINESE (total dialects) 1,300, 20 percent

MANDARIN (China) 930, 16.6 percent includes several dialects

HINDUSTANI (INDIA, PAKISTAN) 498, 8.9 percent

ENGLISH (USA, Canada, UK) 463, 8.2 percent

HINDI (India) 400, 7.1 percent

SPANISH (Spain, Mexico, Cntr Amra) 371, 6.6 percent

RUSSIAN (USSR) 291, 5.2 percent

ARABIC (Middle East) 214, 3.8 percent

BENGALI (India) 192, 3.4 percent

PORTUGUESE (Brazil) 179, 3.2 percent

MAYLAY (Indonesia) 152, 2.7 percent

JAPANESE (Japan) 126, 2.3 percent

FRENCH (France) 124, 2.2 percent

GERMAN (Germany) 120, 2.1 percent

URDU (Pakistan, India) 98, 1.7 percent

PUNJABI (Pakistan, India) 92, 1.6 percent

KOREAN (Korea) 74, 1.3 percent

TELUGU (S.E.India) 72, 1.3 percent

MARATHI (Maharashtra, India) 68, 1.2 percent

TAMIL (India, Sri Lanka) 66, 1.1 percent

WU (Shanghai, China) 65, 1.2 percent

CANTONESE (China, Hong-Kong) 65, 1.1 percent

ITALIAN (Italy) 63, 1.1 percent

JAVANESE (Java, Indonesia) 63, 1.1 percent

VIETNAMISE (Vietnam) 63, 1.1 percent

TURKISH (Turkey) 58, 1.0 percent

The following have less than 1 percent

MIN (Malaysia) 50 THAI (Thailand) 49 SWAHILI (Kenya, Tanz, Zaire, Uganda) 47 UKRAINIAN (Ukraine) 46 POLISH (Poland) 44 KANNADA (S India) 43 TAGALOG (Philip.) 43 GUJARALI (India, Pak) 40 HAUSA (Nigeria) 37 PERSIAN (Iran, Af) 34 MALAYALAM (Kerala) 35 HAKKA (SE China) 34 ORIYA (India) 31 BURMESE (Burma) 31 ROMANIAN (Roman.) 26 SUDANESE (Sundan) 25 ASSAMESE (Assam) 23 PASHTU (Pakistan) 21 FLEMISH (Nedrld) 21 YORUBA (Benin) 19 AMHARIC Ethiopia 18 SINDHI (Pakistan) 17 IGBO (Nigeria) 17 ZHUANG (S China) 15 AZERBAIJANI Azer 15 **HUNGARIAN Hungary 14** NEPALI (Nepal) 14 UZBEK (Uzbek) 13 CEBUANO (Philip.) 13 FULA (Cameroon) 13 SINHALESE SriLanka 13 CZECH (Czechlka.) 12 GREEK (Greece) 11 AFRIKAANS S Africa 10 MADURESE (Madura) 10 OROMO ((Ethopia) 10 BYELORUSSIAN (SSR) 10 KURDISH (Cas sea) 10 BULGARIAN (Bulgra) 9 CATALAN (Andorra) 9 MALINKE-BAMBARA 9 SWEDISH (Sweden) 9 KAZAKH (Kazakh) 8 QUECHUA (Peru) 8 SHONA (Zimbabwe) 8 RUANDA (Rwanda) 8 TARTAR (Tartar) 8 ILOCANO (Luzon) 7 KHMER (Thailand) 7 SOMALI (Somalia) 7 UIGHUR (Xnjiang) 7 XHOSA (s Africa) 7 ZULU(Natal, Lesoth) 7 LINGALA (Zaire) 6 EFIK (Nigeria) 6

THE WORLD HAS A HUGE HINDRANCE TO INTERNATIONAL UNDERSTANDING

known as the language barrier. Most people in the US are not aware of this problem because they can go hundreds of miles in any direction using English. Once you leave the US, Canada, the United Kingdom or tourist traps, you will discover that 92 percent of the world's people do not speak English. In fact the percentage that speak English is declining. The US Census bureau reports that a growing number of Americans speak a foreign language at home with more and more city residents having trouble understanding English. In New York 41 percent ages 5 and up speak a foreign language in their homes and half indicated that they did not speak English very well. In Miami 3/4 speak a language other than English at home and 67 percent indicated they do not speak English well. Near Dearborn Michigan are 300,000 Arabic speakers many of which are not fluent in English. 50 percent of Paterson NJ, 40 percent Santa Fe NM, 40 percent Hartford Conn, 30 percent in Providence RI, 30 percent LA students, 26 percent in Boston etc. 1 in 7 people in the USA speak a language other than English at home. (A 35 percent increase since **1980)** In California this ratio is 1 in 3. 20 percent of those do not speak English (S.F. Chronicle 5-83). Nearly 18 million people in the US speak Spanish. Other languages in descending order are: French, German Italian, Chinese, Tagalog, Polish, Korean, Vietnamese and Portuguese (S.F.Chronicle May-1993).

Some countries have tremendous language problems. Haiti's leaders insist that French be the only language used in the countries schools even though nearly 100 percent of the people speak Creole. Students do not understand what is being taught. Senegal, Kenya,

Nigeria are countries where citizens often do not understand each other because of language differences.

In the world today <u>virtually no students exit their public school life with the ability</u> to communicate with most people of the world. The language situation is changing. There is a trend towards large zone languages, English over North America, German in Europe, Arabic in Middle East, Spanish and Portuguese in Central America, Russian in the USSR, Hindustani, Indonesian, & Chinese over their areas. This is speeding up because of Electronic communications.

MISCELLANEOUS INFORMATION

IDEAL TIME TO LEARN A LANGUAGE From A Survey of Applied Linguistics "the period between age two and puberty as a biologically critical period for language learning" (Wardhauch, 1976, 139).

A Harvard University study that showed that students who have had foreign language exposure in grade school are more likely to take a language in high school than students without this background. "On average, students who started in elementary school were distinctly superior (in foreign languages) at graduation from college" (Harvard, 1967).

Introduction of foreign languages is best done at the elementary levels.

All languages are easy to learn from childhood but this applies only to spoken language...In writing, languages have intrinsic ease and intrinsic difficulty, based on the relation which the written form bears to the spoken. Where the written

form of the language is thoroughly phonetic (that is to say, where the actual sounds of the language are accurately isolated, and each one is given an individual written symbol to represent it) it is easy to learn to read and write . . . Where the spelling does not accurately reflect the sound, as in English, or where there is no connection whatsoever between written symbols and spoken sounds, as in Chinese it is difficult to learn to read and write even when one speaks and understands the language fluently (Pei, 1958, 187). An experimental program in Munich Germany with 386 kindergarten children showed that with only thirty minutes of exposure to French a day, the children learned to use about fifty French words in a simple grammatical form. "Most astonishing of all was the side-effects of learning French--the way it helped these children in their use of their mother tongue" (Nordwest Zeitung, 1979). Teachers told stories in French, like Little Red Riding Hood, that the children knew. Such a program is clearly achievable in any school district.

Scherer stated that the audio lingual method of teaching (stressing speaking and listening before reading and writing) has proven to give students better speaking skills according to his scientific experiment. He suggests that with cable hookups, a good idea would be to have perhaps ten minutes of language instruction twice a day (1964).

The great success of the direct method and the Audio-Lingual Method (ALM) at least show that they work well. ALM supporters claim that it is the fastest method. It may be faster than total immersion. Results of the combination of ALM and total immersion have shown that languages can be learned beyond the survival level in 30 days. When It should also be noted that most esperantists have been self taught through reading and practice. Then their skills were improved through actual use.

Doctors Fantini and Reagan state "Despite research contributions on both L1 and L2, however, it continues to be difficult to substantiate the superiority of one approach to language education over another. As with most social research dealing with human beings, the variables are generally too numerous, complex and interrelated, and there difficult to isolate and control" (40).

"The relative effectiveness of teaching by explicit instruction of rules compared with inductive methods is greater for Esperanto than for any national/ethnic language (Pool, 1992: 1).

Lack of simplicity in English, and French, all appearances to the contrary, could be multiplied almost without limit and apply to all national languages. In fact, one may go so far as to say that it is precisely the apparent simplicity of structure which is suggested by the formal simplicity of many languages which is responsible for much slovenliness in thought, and even for the creation of imaginary problems in philosophy. . . . What has been said of simplicity applies equally to regularity and logic (Sapir, 1968, 117).

No important national language, at least in the Occidental world had complete regularity of grammatical structure. . . . It is well known that the tense systems of French, English and German teem with logical inconsistencies as they are actually used (Sapir, 1968, 117). The priori school made the bad error of trying to treat as a logical entity that which is by its very nature illogical. Language is based on the acceptance of symbols, and symbols, being unreal, cannot be logical...A logical language even if it could be achieved would present enormous difficulty and an unbearable strain on the memory. . . . What is syntax in one language may be vocabulary in another (Wardhauch, 1976, 119). The second language learner has to read just his optional and obligatory categories in the language he is learning. Tense, for instance, is obligatorily realized in English, but optional in Malay; conversely Malay has an obligatory purposive-nonpurposive distinction in the verb system which is optional in English (Wardhauch, 1976, 130).

LANGUAGE EDUCATION

The United States is a virtual desert when it comes to language education prior to college. Fewer than 4 percent of high school graduates have more than two years of a foreign language (Simon, 1980, 2). Less than .1 percent of American students learn a second language prior to college. In fact many American students have a sad revulsion to learning any foreign language. The world is becoming smaller in the sense that we have increasing needs to communicate with other people in the world. When one tries to do so it is soon discovered that there is a tremendous barrier to world communication called the language barrier. The United States has a shameful record of language education compared to much of the rest of the world. "The United States can be characterized as the home of the brave, and the land of the monolingual" (Simon, 1980, 1). Paul Simon states we should erect a sign at each port of entry into the United States "WELCOME TO THE UNITED STATES--WE CANNOT SPEAK YOUR LANGUAGE." Since many Americans are prejudiced when it comes to language even the mention of any candidate other than English may bring out the hidden bias most people have towards their native language. The screening for a suitable candidate for the international language should be scientifically done with an unbiased and empirically verifiable test instrument.

Since about 98 percent (Culbert, 1990, 808) of all people do not write English, and since average people in most countries do not understand English, finding people who students could correspond with is difficult.

The presidential commission that was formed to study the educational language situation, found that only 15 percent of American high school students take a foreign language and only a third stayed with it long enough to gain even minimal competence. Only 8 percent of American colleges and universities required a foreign language for admission in 1979, compared with 34 percent in 1966. The commission reported that America's "scandalous incompetence" in foreign language studies contributes to a "dangerously inadequate understanding of world affairs. Our schools gradate a large majority of students whose knowl edge and vision stops at the American shoreline" This was from Strength Through Wisdom, a Critique of U.S. Capability, a report to the President from the Presidential Commission on Foreign Language and International Studies (1979, 6). Richardson states that American students study French Spanish and German thus ignoring 80 percent of the world's people who speak other tongues. When President Nixon visited Peking in 1972, the

president was obliged to use the Chinese leaders' own interpreters (1988, 8). The Presidents commission found that "the US government has no qualified translators at all for most of the world's languages" (Simon, 1980, 4).

Tests show that of those who study foreign languages, only 17 percent in the United States learn to speak, write, and read it with ease but in other countries this goes up to 63 percent (Simon 1980, 5). As a bridge language Esperanto has many times served translators who not knowing the original language of a work, base their translations on the Esperanto version. This technique is usually used when translating between two less commonly known languages such as Polish/Vietnamese, Chinese/Rumanian ..The procedure can give quite satisfactory results, since Esperanto translations are very often closer to the original than those in any national language (Auld, 1982, 111-158).

WHAT ESPERANTO OFFERS THE ELEMENTARY TEACHER

This language offers the elementary teacher several things that no other language offers. 1. The teacher can begin teaching Esperanto within a few hours of beginning study in it. (There is a book for teachers put out by the State of California Esperanto Education Commission with teaching suggestions) 2. The research this researcher saw proves empirically that Esperanto is the easiest language to learn, and teach, since the grammar is so simple and it uses many international and English words. 2. It is a very practical language which the classroom teacher can use for other subjects. For example, when this teacher had unsuccessfully tried to get my sixth grade class to learn about other countries it seemed nothing worked as well as me showing them, and reading letters this researcher received from Esperanto pen pals from several countries. Suddenly there was a rush for the encyclopedias in the room. Many students, on their own and began reading about countries and cultures. Several students have asked me if they can learn Esperanto so they can correspond with others around the world. 3. It is often difficult to find pen pals for kids from many countries unless one uses Esperanto sources which have hundreds of addresses. 4. Esperanto offers the elementary teacher an excellent tool to teach global awareness, geography and other subjects. 5. It offers the elementary student the opportunity to learn more about many cultures and countries and other subjects by inspiring them to do so. 6. Esperanto offers students the opportunity to write directly to another person or class in almost 100 countries around the world, to ask any questions they would like, and to obtain a reply. This researcher has not been able to do this in English because most people in the world do not speak or write English as it is so difficult as a second language for them particularly elementary students. Also with English it is difficult to even find a source not to mention a "free" source as many pen pal organizations charge for addresses. 7. Esperanto often increases students interest in languages. It turns them on to languages. 8. People learn other languages faster after learning Esperanto. See proof above.

To education Esperanto offers the opportunity to broaden its horizons not only for global awareness, but to actual communication between classes and students around the world. If two classes write to one another and tell each other about each's respective culture and daily life, both sets of students learn much about themselves and about others in the world, but that is not all. In the process friendships are made, global awareness is made personal, and kids find out that people on the other side of the globe are more than statistics, they are real living friends with the same human feelings and desires. This is a lesson that is best taught through personal contact. More classrooms could communicate using Esperanto, than could with any other language.

Facts from Guinness Book of Records are as follows: Esperanto has the least irregular verbs-none; most complex Chippewa with 6,000 verb forms; Tabassaran with 48 noun cases; Inuit 63 forms of present tense and simple nouns have 252 inflections; most complex character is a Chinese character with 64 strokes; longest alphabet Cambodian with 72 letters;

shortest is Rotokas with just 11 letters; Guinness and others show English to have the most words, greatest number of irregular verbs, longest words (although German and some other languages also have many long words, most synonyms, most duplicate words, most antonyms, most homonyms (Guinness 148).

The Scholastic Dictionary of Synonyms, Antonyms and Homonyms lists 12,000 Synonyms 10,000 Antonyms and 2,000 Homonyms (Scholastic Dictionary of Synonyms, Antonyms and Homonyms, 1965). Berlitz lists 656 points of usage. Exceptions and other facts. *The Barron's Educational Series* on languages lists well over 1001 extra facts that need to be memorized in several languages. English has over 200 irregular verbs (Encyclopedia Britannica, 1980).

Charles Berlitz states that English has a vocabulary more than twice the size of any other language and the next in size is German (1982, 311).

Mario Pei comments that half the vocabulary of civilized languages consist of science and technical terms (1949).

How many languages can one learn? It is doubtful that a human can maintain fluency in more than 20 to 25 languages. George Campbell worked with 54 languages. Dr. Williams worked with 58 languages (Guinness 147).

ROMAN ALPHABET

Mario Pei states that the Roman alphabet is the most widely spread "as well as the one providing the greatest possibility of simplicity" (1949, 92). The entire nation of Turkey switched from Arabic to Roman writing because the Roman offered a more efficient system, and also that the Roman alphabetic system is among the best for recording sounds (1949, 92). Many other alphabets mostly record consonants. Pei states that no (national) language has absolute script for sound correspondence (1949, 93).

The Roman alphabet known as the Latin alphabet is the most widely used in the world. It is even taught now in China and Japan. The areas of the world that don't use it are in Arab countries, Iran, Afganistan, parts of Indo China, and parts of the former USSR. However English is making some inroads into some of these areas (Piron 318).

Edward Thorndike of Columbia University, who is a noted educational researcher concluded, after a careful study, that one year of college Esperanto is equivalent to four years of a national language. This is per Columbia University, Institute of Educational Research, Language Learning summary of a report to the International Auxiliary Language Association (1933).

Many students go on to study other languages and do very well with them. In Somero, Finland, pupils were taught one year of Esperanto followed by two of German. A control group spent the same three years studying German alone. At the end of the first year, the test group knew enough Esperanto to be taught their geography lessons in that language. After the third year, the Esperanto learners had all but overtaken the control class in the amount of German material covered, and they spoke and wrote German with more confidence and enthusiasm than those who had studied only German (Markarian, 1964, 8).

TOPOLOGICAL CLASSIFICATION

In order to understand languages the following short topological classification of languages is included. This is based primarily by present-day structure and shows four classifications of languages. The following shows Dr. Pei's breakdown.

- 1. Inflectional languages in which grammatical relations are indicated by internal changes in words, endings, and prefixes by combination of bound and free morphemes. "the free morphemes are sharply reduced in number, since bound, adjectives, and verbs cannot generally be used in their root forms, but only in conjunction with an ending (example Latin root mut-, 'wall' cannot appear by itself but only in case forms such as murus, muro, muris).
- 2. An agglutinative language adds separate suffixes which, unlike the inflectional endings, may enjoy separate existence as free morphemes. Example Esperanto 3. Isolating uses only

free morphemes shows grammatical relations by word order. Example Chinese. 4. Polysynthetic or Incorporating combines within a single utterance numerous bound morphemes so that the unit is not the word but the word group or sentence. Example Oneida g-nagla-sl-I-zak-s means I am looking for the village. The g means I, nagla means living, sl makes nagla a noun changing its meaning to village, zak with the prefix I makes it a verb meaning look for. Pei states that none of these parts would convey any very definite meaning if used by itself (Pei, 1965).

The supposed inferiority of a constructed language to a national one on the score of richness of connotation is, of course, no criticism of the idea of a constructed language. All that the criticism means is that the constructed language has not been in long-continued use. As a matter of fact, a national language which spreads beyond its own confines very quickly loses much of its original richness of content and is in no better case than a constructed language. . . . We need not allow avowed or minor imperfections to keep us from putting it into immediate operation (Mandelbaum, 1968, 118).

Distribution was ruled out as a major factor in selection. No language is spoken by more than 16 percent of the population. Some languages are spoken worldwide. In order of worldwide distribution appears to be English, French, Esperanto, Arabic, Spanish, Russian, Portuguese, German, Chinese, Indonesian, Italian, Hindustani, Japanese, Bengali (Pei, 1958). If a language was to be selected primarily on basis of greatest number of speakers, it would be Chinese because nearly one fifth of the world population can read it.

In the future machine language translation will play an important part. Therefore it would be helpful if the language chosen is one that works well with machine translation. Several languages have been rejected for machine language translation including English because of ambiguity. Esperanto has been selected and is now being used by a commercial company doing work for the European Economic Community.

The Danish electronics company Christian Roysing and a Dutch consultancy company D.S.O. have won a major development contract from the Commission of the European Community which may ease the E.E.C.language problem. The system will translate, to and from, eight E.E.C. languages. Each language will be translated first into Esperanto and then into a new language. Esperanto is especially suitable for the purpose because if its simple grammatical structure....Internacia Lingvo (Esperanto) in particular satisfies all the six criteria listed here for the choice of an Intermediate Text Language (Kelly, 1983, 1,3). Edward Sapir, a noted linguist and intellectual states that an international auxiliary language must facilitate the growing need for international communication. He states that just spending an enormous amount of time, labor, and money on translation services is largely a waste. He states that an international auxiliary language should serve as a broad base for every type of international understanding "which means of course, in the last analysis, for every type of expression of the human spirit...and all human interests...But this is not all. The modern mind tends to be more and more critical and analytical in spirit, hence it must devise for itself an engine of expression which is logically defensible at every point and which tends to correspond to the rigorous spirit of modern science." There is a lot of prejudice about languages. Mr Sapir states that the speakers of a national language are under profound illusions as to the logical character of its structure. Perhaps they confuse the comfort of habit with logical necessity. "If this is so--and I do not see how it can be seriously doubted that it is--it must mean that in the long run the modern spirit will not rest satisfied with an international language that merely extends the imperfections and provincialisms of one language at the expense of all others" (Mandelbaum, 1968, 50).

Jean Temple notes that: When children do have trouble understanding words, sometimes the problem is not that they have an inadequate vocabulary, but that the sentences in which the words appear are structured in a fashion too complex for them. What the students experience as confusion over individual words is, in fact, a confusion over syntax (1986).

Edward Sapir states: "What is needed above all is a language that is as simple, as regular, as logical, as rich, and as creative as possible; a language which starts with a minimum of demands on the learning capacity of the normal individual and can do the maximum amount of work; which is to serve as a sort of logical touchstone to all national languages and as the standard medium of translation. It must ideally, be as superior to any accepted language as the mathematical method of expressing quantities and relations between quantities is the more lumbering methods of expressing these quantities and relations in verbal form (Mandelbaum, 1968).

NOTES ON ENGLISH

English is the largest language with over one million words and the most widespread. It is one of the "easier languages", although it is abut 100 times as difficult as the easiest. But English suffers some major problems: It holds the record for the most words not spelled as spoken (estimated to be over 500,000). Over half of its words are not spelled as pronounced. It has the worst spelling in the world. It holds the record for the most irregular verbs 283 (Guinness 147). It has over 8,000 idioms. It has hundreds of words that present continuing problems even to native speakers. It has the most ambiguous vocabulary of all languages. The word "set" for example has 58 noun uses and 126 verb uses. The English word 'inebriated' has 2,241 synonyms. The English word 'isosceles' has 259 spellings and 'cushion' has about 400 spellings (McFarian, 1990 p 144). It has words that are too long for common use such as the English word praetertranssubstantiationalistically (37 letters). The longest real word is floccipaucinihilipilification (from the Oxford English Dictionary) 29 letters (McFarian, 1990, 144-146). The English vocabulary contains 490,000 words plus 300,000 technical terms the most of any language. "but it is doubtful in any individual uses more than 60,000; The membership in the International Society for Philosophical Enquiry (no admission for IQ's below 148 have an average vocabulary of 36,250; Shakespeare employed a vocabulary of c. 33,000 words (Guinness) English has the most duplicate words. There are hundreds of exceptions to the over 1,400 grammar rules (Houghton-Mifflin).

The Barron's Educational Series on languages lists well over 1001 extra facts that need to be memorized in English. Charles Berlitz states that the average speaker uses about 2,800 different English words daily. The Sunday newspaper has about 25,000 words. He states that well read speakers can recognize 25,000-50,000 words (Berlitz, 1982, 137). Charles Berlitz also states that English has a vocabulary more than twice the size of any other language and the next in size is German (1982, 311). Mario Pei states that every (national) language is "laden with idioms" (1949, 144). Charles Berlitz states that one of the big disadvantages of English is its "nonphonetic spelling. One splendid example is the phrase 'though a rough cough and hiccough plough me through'--in which -ough is pronounced six different ways" (1982, 314).

English has many difficulties and often <u>takes average people over 10 years to master the speaking and writing</u>. Many students of English, even after many years of study, still make many grammatical errors in speaking and cannot write a business letter.

HOW DOES ESPERANTO COMPARE TO ENGLISH?

Esperanto is more like English than any other language in the world. Writing fluency in Esperanto can occur in 1/10 the time of English because Esperanto does not suffer the drawbacks of English. (The worst spelling & pronunciation and the most massive ambiguous vocabulary of all languages with over 8,000 idioms) As a second language English is very difficult for the average person to learn. In Esperanto every letter has only one simple sound and all words are phonetically spelled--no exceptions. There are no difficult sounds to pronounce. The vocabulary is well developed and concise with few ambiguities or idioms. English has 1400 grammar rules with hundreds of exceptions. Esperanto has 16 rules that fit on one hand written page and has no exceptions. Research shows that the first 200 basic

Esperanto words replace over 4000 verbs (Ogden). Research also shows that the basic Esperanto vocabulary and grammar do the work of over 20,000 words (Ogden). This is possible because of the large number of synonyms in languages and because many words represent a kind of wordshorthand in which one word takes the place of two or more other words. Examples of word-shorthand are: enter for go in, exit = go out, disembark = go off the ship, capsize = overturn, carnal = of the body, glee = great pleasure, inflection = change in form, patron = one who uses, perpetual = always, proverb = wise saying. Over 30 common affixes can be used alone or will work with most words to form thousands of additional meanings without having to learn any new words. The affix **mal** for example forms the opposite meaning to any root word. Learning this one word permits the creation of thousands of words without having to learn thousands of words.

NEUTRALITY

Learning any national language requires learning some of the customs and culture of the home country. Many people resent being forced to learn someone else's national language. There is much resentment against English in several countries. This is also true of other national languages. The native speakers of the language have superior knowledge of the national language, take advantage of non-native speakers. The non-native speaker may make embarrassing mistakes and be ridiculed causing more resentment. Esperanto successfully ends language discrimination by putting all speakers on a neutral and equal footing. Speakers are not forced to learn someone else's national language. There is something almost magical about Esperanto as people seem to get along better. Perhaps it is the lack of resentment, or may be the feeling of brotherhood. It is impressive to see people from about 80 countries fully understanding each other without the need for interpreters.

"That language is best which is easiest for the majority" (Pei, 1958, 185).

Because of the tremendous language barriers in the world most human beings are not able to understand most other human beings on this planet. This has been a major contributing factor to many wars, battles, violence, and has resulted in thousands of deaths.

At the United Nations each page translated into 6 languages costs over \$100. This could prevent blindness in many children or make a 3rd world family self sufficient. If Esperanto were adopted, hundreds of millions of dollars would be saved, and better inter-language communication and world understanding, would result.

Esperanto provides the opportunity, and most time-efficient potential way for every human to communicate with every other human on this planet. Better inter-language understanding is needed now world wide where mis understanding and lack of communication between speakers of different languages are common, even in the USA.

A common world language would yield benefits such as savings of human lives; better world trade, better standards of living world wide, better world health, more international friendships and better understanding world wide which will result in a safer world for all of us.

There are many situations when we need to speak with someone who does not understand English. Most people find learning another national language even English too difficult.

If we learned English, Spanish and French we could understand only 17 percent of the world's people.

Why haven't you learned Chinese, the biggest language in the world, the one read by over a billion people? Note Chinese consists of many spoken languages. Or why don't people learn Russian, and Portuguese? The answer is the same. As a matter of fact if one learned all of those languages they could still understand less than 30 percent of the world's population. If one substituted Italian, Polish and Swedish for the difficult Chinese one could understand

less than 30 percent of all people on Earth. <u>English is being taught in many countries, but just like our high schools here, most people end up remembering only a few phrases.</u>

The major factors against Esperanto are the lack of publicity and promotion, and the small number of speakers (estimated to only be about two million). This small group of people from all walks of life are individually battling the massive political and social clout, propaganda, and publications of the big languages. Most English speakers feel that English should be the international language in spite of the shortcomings of English. There is practically no advertising about Esperanto compared with millions spent promoting other languages. So the world as a whole is uninformed about it. Teachers of other languages want it kept a secret because if the students found out that there was a language that was international and learnable with one-quarter the effort, the students would flock to the Esperanto classes. The status quo would be upset. In educational institutions there are many teachers of other languages and departmental personnel who oppose its teaching because they fear loss of their jobs. Many others simply oppose the teaching of anything that threatens their sacred English.

Alfred Petrov, an excellent Esperantist, has been teaching English for three years at a university in Nagoya, Japan. Many of his students have studied English for up to 10 years; yet, they can't write a scientific paper in English. Nagoya, a city of 300,000 population, has 1000 members in its Esperanto Club (California Education Commission, 1988, 4).

People usually pick the easiest solution and Esperanto is it. The World Almanac and Book of Facts states "Esperanto was savaged by Nazism, Stalinism, Fascism, the Japanese militarists of the 1930's and chauvinistic groups in many other countries. Not until the late 1950's did the number of speakers begin to show the steady increase which continues...." (Hoffman, 1990). It is the greatest success story of any language ever as it was spread at the grass roots level by people who fell in love with it and not by money or power. They learned it because they wanted to, not because they were forced to. They took on learning a language on their own. So there must be something about Esperanto that attracts people to it. After 100 years it has been fully tested, refined and found to be completely adequate for all uses. Esperanto works and has won as the people's choice in spite of overwhelming odds against it. Even The Universal Esperanto Association has been nominated for the Nobel Peace Prize. Now we need to market it to the world.

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The following list shows how the highest utility words compare between the Kontakto, Juna Amiko, letter studies, conversation studies, basic language, Durr, and Internet usage. LEFT TO RIGHT First is the International Vocabulary word, next the English translation. Totals are shown at the top.

Column K shows words listed in Kontakto's most basic list as K and Kontakto's next highest list as k. This is a very popular Esperanto monthly magazine which does fine using around 1000 word roots. As does Juna Amico shown in next column.

J indicates roots found on the Juna Amiko list a populat children's magazine.

B shows words on C.K. Ogden's basic list from his brilliant extensive research.

R roots on Durr's list of words from children's books.

E shows roots very much like English words and e lesser so.

AR shows the approximate average word ranking in frequency from all studies.

UNT Internet ranking based on millions of words counted.

LTR Ranking found in hundreds of letters.

AhRk lists the rank of the English translation word in the American Heritage Dictionary extensive word frequency study based on millionsof words studied.

Ranking of the word root from extensive research by European researcher Zlatko Tisljar. Column A lists the HIGHEST UTILITY ROOTS. These roots have been found to be highest in frequency and need in several studies. These roots should be learned first by beginners in order to achieve maximum utility. This grouping is based on studies of over 5 million words. This group could change in minor ways as research continues. None of these groups are set in stone. Basic word lists are going to change over time and are only a reflection of the usage and needs of the people communicating. Studies indicate that students may achieve 80-93 percent understanding from this group plus the common endings and affixes.

Column B is the second highest utility group. These roots should be learned as soon as possible after group A. Studies indicate students may achieve 85-95 percent understanding when this group is mastered in addition to group A.

Column C is the next lower usage group of high frequency usage words. Further studies are necessary to determine with accuracy placement of roots in these groups. Column L lists words that appear to be a little Less high utility or usage.

Column "G" stands for grammar. This lists roots conveniently listed in the grammar group.

Dec 2009	808											808	300	300	193	15	231
basic words	a	K	J	В	R	Е	е	AR	UNT	LTR	AhRk	Zrk	A	В	С	G	L

KELK	a few	K	J					130		113	132	103	a				
iom a little	a little	1.	,					255	155	175	79	60				g	
PRI	about	K	J	В	R		e	38	27	175	37	21	a			5	
APUD	about	K	J		R		_	23	24	330	392	-21		b			
SUPER	above	K	J	В	R	Е		56	85	330	53	510	a	Ť			
akcent	accent		Ť			Е			- 00			010					L
AKCEPT	accept	K	J			Е		800		274		374		b			
kont	account		Ť	В			e	800				5,.			С		
ATING	achieve	k	J				e	328		268	324	416		b			
akir	acquire		J				e				464				С		
TRANS	across	K	J	В		Е		179			184	186	a				
AG	act	K	J	В			e	800	395	256	614	209		b			
AKTIV	active	k	J			Е				386		598		b			
EFEKTIV	actual	k	J				e					622		b			
ADRES	address	K	J			Е		800	220	51		373	a				
avantagh	advantage					Е									С		
reklam	advertisement	k		В				800				365			С		
konsil	advise	K	J			Е						477			С		
AFER	affair	K	J			Е		270	227	244	267	69	a				
POST	after	K	J	В	R	Е		66				45	a				
<u>DENOVE</u>	again			В	R			107	153	261	107		a				
KONTRAUh	against	K	J	В			e	195	162	378	198	331	a				
AGH	age	K	J			Е		415		198		520		b			
agent	agent					Е											L
AER	air	K	J	В		Е		117	363	416	119			b			
PRESKAUh	almost	K	J	В				157	241		162	133	a				
<u>LAUh</u>	along	k	J	В				126		202	128	99	a				
alfabet	alphabet		J			Е											L
<u>JAM</u>	already	K	J					76	205	148		63	a				
<u>ANKAUh</u>	also	K	J					88	58	33	86	36	a				
KVANKAM	although	k	J	В				234	357			435		b			
ChIAM	always		J						149	294	134	107	a				
<u>KAJ</u>	and	K	J	В	R			3	6	3	3		a				
ANGUL	angle	k	J	В			e	443			426			b			
KOLER	angry	k	J	В				589			554			b			
BEST	animal	K	J	В			e	149		396	154			b			
ANONC	announce	k				Е						525		b			
RESPOND	answer	K	J	В		Е		192	77		195	300	a				
<u>po</u>	apiece	k						800	328							g	
<u>APER</u>	appear	K	J			Е		544		312	512	210	a				-
pom apple	apple	,	J	В		_		642	167			318			-	_	L
aparat	appratus	k	+	В		Е		800	100			375		-	c	-	-
april	april	k	J	7		Е		000	198						С	-	T
argument	argument	1.	,	В		Е		800			414					_	L
brak Chipikalii	arm	k	J	В	n	\vdash		427	117	254	414				С		
ChIRKAU'	around	K k	J		R		e	89	117	254	87	250	a		-		
arangh	arrange	k K	J	D		Е	e	620		210	577	259		b	С		
ART	art	K	J	В		Е	\vdash	620	2.1	310	577			U			L
artikol	article	IV.	\vdash		_	Е		736	31			611			1	 	L
konstat DEMAND	ascertain ask	K	J	В	R	Е		135	137	88	138	122	9		1		L
	ass, donkey	k	J	В	K	E		133	13/	88	138	122 603	a		1		L
azen		K	J			Б	e		245			003			1		L
asert	assert	K	J			Е		746	345			527			С		L L
asoci ChE	association	K	J	В	R		e	746 17	22	112	16	526 90	a		+		
	at least	k	J	D	K			1 /	22	112	10	242	а		С		\vdash
almenauh	at least	k	J .	D		Е		725			627	242		 	c		
atak	attack		т	В	_	Е	_	725			627	207		b	+	 	
ATENT	attention, pay	k	J	В	<u> </u>		e	507			478	287		Lυ	L		

aubaust	Lavanat	k	J	l	1	Е	l		150					l	С		T -
auhgust	august	K	J			E			158					 	+	-	L
auhtoro	author	K	т					204	105	102	207	272	0	 			L
AUhT(O)-	automobile	_	J	_		Е		204	195	192	207	273	a	h		_	\vdash
AUhTUN	autumn	K	J	В	_		e	800						b	-	-	
vek	awake babble,	k	J	В			e	800						<u> </u>	С		
babil	chatter		J				e								c		
ekvilibr	balance			В			e	719			625				С		
banan	banana		J			Е	Ť	, -,				417					L
bank	bank		J			Е		529			499				С		
bar	bar, dam	k	J			Е		02)			.,,,				c		
BAZ	basic	k	Ť	В			e	353	219		318	351		b	Ť		
korb	basket	k	J	В			e	762	21)		643	433		<u> </u>	С		<u> </u>
ban	bath	k	J	В			Ť	800			013	133			 		L
BATAL	battle	k	J	В		Е		491			465	527		b			 -
PRAV	be right	k	J	В	R	ь		491	88		403	569		b			
			, ,	ь	K				00					-			L
barb	beard	k	J			\vdash		156				605 674		 	С	\vdash	+
bat BEL	beat	K	J	Ъ		\vdash	e	456	217	117	200		2	 	+~	\vdash	\vdash
	beauty		_	В		_	\vdash	296	217	117	290	161	a	1			
<u>ChAR</u>	because, as	K 1.	J	В			\vdash	94	64	53	93	41	a	 			_
lit	bed	k 1-	J	В		_		350			245	484		+	С		L
<u>bier</u>	beer	k	-	<u> </u>	_	Е	_		0.1					 	-		L
ANTAUh	before	K	J	В	R	_		75	91	74	72	79	a	-	+		
kondut	behave	17	Ļ	В			e	675			602			1.	С		
JEN	behold	K	J	_	_							127		b	-	-	
KRED	believe	K	J	В			e	515	112	251	485		a	├	-	-	
aparten	belong	k	J									601		<u> </u>	c		
fleks	bend	l		В		Е		800			635			<u> </u>	С		<u> </u>
KROM	besides	K	J					578	292	230	547	356	a	<u> </u>			<u> </u>
INTER	between	K	J	В		Е		112	122	42	114	85	a	<u> </u>			
preter	beyond	k	J				e	493						<u> </u>	c		<u> </u>
bicikl	bicycle	k	J				e					606		<u> </u>			L
GRAND	big, great	K	J	В	R	Е		64	110	61	109	106	a	<u> </u>			Ь—
BIRD	bird	K	J	В		Е		267			266	529		b			Ь—
NASK	birth	K	J	В				459			437	359		b			Ļ—
bit	bit			В		Е			163								L
NIGR	black	k	J	В			e	219	359		221	663		b			<u> </u>
sang	blood	k	J	В			e	440			423				c		
blov	blow	k	J	В			e	562			533						L
BLU	blue	k	J	В		Е		282			276			b			
tabul	board	k	J					475				583		<u> </u>	c		
BOAT	boat	<u> </u>	J	В		Е		303			297			b	<u> </u>		
KORP	body	k	J	В		Е		207	355		210			b			
bol	boil	k		В			e	800									L
<u>bomb</u>	bomb					Е									c		
LIBR	book	K	J	В			e	223	173	55	225	146	a				
ambauh	both	k	J					129	116		131				c		
BOTEL	bottle	k	J	В		Е		621			578	419		b			
fund	bottom		J				e										
bovl	bowl							654			597						L
SKATOL	box	K		В					320			368		b			
KNAB	boy	K	J	В	R			148		252	153	232	a				
branc'	branch			В		Е		604			567						L
pan	bread	K	J	В			е	536			504	669			С		
ROMP	break in two	K	J	В			Ĺ	465	352		443	367		b			
SPIR	breathe	k	J	В			e	593			558			b			
brik	brick, bar of	Ť	Ť	В		Е	Ť				612						L
pont	bridge	k	J	В		Ť	e	705			618	568			С		-
BRIL	bright	K	J	В			e	371			363	200		b	Ť		\vdash
DIVIL	Urigiit	117	LJ	гр	<u> </u>			5/1			303			10			

hel	bright	k	J	В			е	800				1		Ι		L
FRAT	brother	K	J	В			e	452		108	433	326		b		
BRUN	brown	k	J	В		Е	-	478		100	454	320		b		
bros	brush	k	J	В		ь	e	800			434			0		L
FUSH	bungle	k		ь				800				355		b		L
brul	burn	k	J	В				671			601	333		0	С	
BUS	bus	K	J	ь		Е		391			571	377		b	+	
KOMERC	business	K	J	В		E		410	257	376	396	311		b		
SED SED	but	K	J	В	R	ь		25	20	370	25	17	a	Η -		
buter	butter	k	J	В	K	Е		23	20		23	1 /	- u	 		L
buton	button	k	J	В		E		800						 		L
AChET	buy	K	J	Ъ		L		233	243	151	235	143	a	 		
PER	by	K	J	В		Е		356	300	131	22	95	a	 		
kuk	cake	k	J	В		L		728	300		629	652			С	
KALKUL	calculate	K	J	Б		Е		720			02)	032		b	+-	
kalendar	calendar	k	J			E								-	С	
VOK	call	k	J		R	L	e	68	378		65			b	+-	
kalm	calm	K	J		IX	Е		800	376		308			۲		L
POV	can	K	J	В	R	L		31	28		31	26	a	1		١Ť
kapabl	capable	k	J	٦	I	Е		718	20		<i>J</i> 1	231	 	1	С	
KART	card	K	J	В			e	800	354	76		470	a		Ť	
ZORG	care	K	J	В			۳	295	JJ-T	,,,	289	284	"	b		
PORT	carry	K	J	Ť			e	730			292	152		b	1	
kaz	case	k	3			Е		750			2,2	132		Ť		L
kased	casette	K					е	800		309						L
KAT	cat	k	J	В		Е	Ť	444		507	427			b		
KAPT	catch	K	J				е	354		430	349	262		b		
KAUhZ	cause	K	J	В		Е	Ť	498	309	296	471	202	a	Ť		
ches	cease	k	J					.,,			.,,					L
CENTR	center	k	J			Е		318	276	240	313	461		b		
CERT	certain	K	J	В			e	181	123	243	186	93	a			
chen	chain			В			e									
ShANGh	change	K	J	В				191	172		194	175	a			
chapitr	chapter						e	639				709				L
<u>charm</u>	charm		J			Е						349				L
chas	chase						e									
kontrol	supervise	k				Е		476			453	332			С	
chek	check					Е		329			325				С	
fromagh	cheese			В												
<u>kemi</u>	chemical			В			e	677			603					L
kest	chest		J	В			e	271			268					L
kok	chicken		J				e	767			645				c	
<u>ChEF</u>	chief	K	J	В	R	Е		315	331	140	312	370	a			
<u>INFAN</u>	child	K	J		R		e	144	299	275	149	145	a			
chokolad	chocolate		J			Е										
cigared	cigarette	k	J			Е						530				L
cirkl	circle	k	J	В		Е		346			341				c	
<u>URB</u>	city	K	J	В			e	198	252		201	270	a			
KLAS	class	K	J			Е		272	293	266	269			b		
<u>KLAR</u>	clear	K	J	В			e	339	297	402	334	312	a		<u> </u>	
lert	clever	k	J	В				698				482			c	
<u>FERM</u>	close	K	J	В	R		e	225	240		227	276	a			
<u>ChI</u>	closeness	K	J										a			
TUK	cloth, piece of	k	J	В				557			527	514		b		
VEST	clothing	k	J				e	450			430	589		b		
NUB	cloud	k	J	В				524			494			b		
klub	club	K	J			Е						642			c	
mantel	coat	k	J	В			e	585			552				c	

KAE	66	k	J	l .	l	Е		((2		410	600		1	Ъ		l	
KAF	coffee	K	J			E		662		410	600			b		-	
KOLEKT		K	J	В		E		250	260	134	251	472		b			
KOLOR	color	K	J		n	E		358	369	375	351	472		U			
VEN .	come	k	J	В	R	г	e	90	143		89	38	a	 			
komfort	comfortable	K		В		Е		800	215					 	С		L
koment	comment	1-				Е			315			126		 			L
komis	commission	k							226			136		 			L
komitat	committee	k	ļ .	_		_		202	336	200		150		h			L
KOMUN	common	K	J	В		E		202	310	398				b	-		
komunik	communicate	k		_		E		800		407		643		1.	С		
KOMPANI	company	1	_	В		E		594			559			b			
KOMPAR	compare	k	_	В		Е		533			501			b			т
<u>konkur</u>	compete			В			e	800		361		547		<u> </u>			L
kompil	compile	ļ.	_				e							 	-		L
plend	complain	k	J									676		1	С		
KOMPLET	complete	 		В		Е		254	365		253	473		b			
KOMPUT	compute	k	_			Е		800	193	109		<u> </u>		b	<u> </u>		<u> </u>
koncern	concern	k	_			Е		800				431		-	С	_	
konkret	concrete, not abstract	k				Е						294					L
kondich	condition	k	J	В		Ť	e	606			569			l l	1		L
konfes	confess	k	Ť	Ť		Е	Ť	550			207	644		l l	1		L
gratul	congratulate	k	J			Ĺ	e					381		l	С		
kongres	congress	k	Ť			Е	Ť					74		1	†		L
konsci	conscious	1		В				800				476		<u> </u>			L
KONSENT	consent	K	J	٢		Е		631	222			204		b			
KONSIDER	consider	k	Ť			Е		597	279		562	645		b			
KONSIST	consist	k	J			Е		0,,				432		b			
konstant	constant	k	۲			Е						549		Ť			L
KONSTRU	construct	K	J	В			е	251		390	250	647		b			
KONTAKT	contact	K				Е	_	800	379	405	230	263		b			
REG	control	k	J	В			е	800	196	103	440	203	a	Ť			
konversaci	conversation		J			Е	Ť					650					L
KUIR	cook	K	J	В				509			480	295		ь			
КОРІ	сору	k	Ť	В		Е		419	230	409	406			b			
KOREKT	correct		J			Е		349			344			ь			
korespond	correspond	k	J			Е				27	_	550			С		
KOST	cost	K	J	В		Е		513	254	111	483	176	a				
tus	cough		Ť	В								515			С		
kurs	course	k	J				e		138								L
kovr	cover	k	J	В			e	326	-20		322	478			С		
bovin	cow	k	J	Ť			Ť	648			593			i –	c		
kre	create	k	J	В			e	727	388		268		a				
krim	crime		Ė	В		Е	Ė										L
kruel	cruel	k		В		Е		800				434			С		
KRI	cry	k	J	В	R		e	347			342	551		b			
plor	cry	k	J	Ė	Ė							495			С		
kub	cube					Е		697									L
KULTUR	culture	K				Е		800	385	182		205		b			
TAS	cup	k	J	В				693	362		610			b			
kurten	curtain			В		Е		800									L
<u>kurb</u>	curve			В			е	800			516				Ì		L
KUTIM	custom	k	J						256		205	383	a				
TRANCh	cut	K	J	В			e	211	373		214	403		b			
damagh	damage			В		Е		800									
DANC	dance	k	J			Е		559		368	529	610		b			
DANGHER	danger	k	J	В		Е		583			550		a				
dat	date		J	Ĺ		Е			349						С		
TAG	day	K	J	В	R	Ĺ		83	157		80	96	a				
<u> </u>	•	•		•			•						•	-			

KAR	dear	K	J	В			e	571		43	541	545		ь			
MORT	death	K	J	В			e	453	353	73	434	343		b			
decembro	December	k	J	ь		Е		733	232		737			<u> </u>	С		
DECID	decide	K	J	В		E		362	389	283	355	305	a		+~		
deklar	declare		J			Е		761	307	203	333	303	-				L
PROFUNDa	deep	k	J	В		L	e	292			286			b			
defend	defend	k	Ť			Е	_	609			572			Ť	С		
difin	define	k				Е		007			312	379			 		L
grad	degree		J	В		Е		605			568	543			С		
delikata	delicate		Ť	В		Е		800			200	3 13			<u> </u>		
POSTUL	demand	k	J					000	361			496		b			
dens	dense	k	Ť			Е			301			.,,		Ť			
dent	dental	k	J	В			e	482			457				С		
depende	depend		J	В		Е		753		397	639				c		
dezert	desert		Ť					528									
DESEGN	design	k	J	В			е	239	348		239			b			
DEZIR	desire	K	J	В	R	Е		218	341	45	220	243	a				
detal	detail	k		В		Е		658									
diabl	devil		J									211			İ		L
diferenc	differ	k				Е			272								L
fos	dig	k															L
digest	digest			В		Е								L			
DIREKT	direct	K	J	В		Е		423			410	615		b			
diskriminaci	discrimination					Е						532					L
DISKUT	discuss	k	J	В		Е		712	225		624	353		b			
disk	disk	k				Е			234	297					С		
disput	dispute					Е											
distanc	distance		J	В		Е		305			299						L
DIVID	divide	k	J	В		Е		502			475	533		b			
doktor	doctor	K				Е		558	360		528	618			С		
dokument	document					Е											L
HUND	dog	k	J	В	R	Е		243		414	242			b			
pup	doll	k										446					L
PORD	door	K	J	В			e	210			213			b			
DUB	doubt	k	J	В			e		376			619		b			
rev	dream, day		J														L
rob	dress	k	J	В			e	590			555				c		
TRINK	drink	K	J	В		Е		598			563	283		b			
gut	drip, drop		J	В			e	548			517						L
konduk	drive	k	J	В			e	650			446				c		<u> </u>
SEK	dry	k	J	В			e	299			293			b	ļ		
<u>DUM</u>	during	K	J	В	R			127	114	137	129	113	a		ļ		<u> </u>
polv	dust		J	В			e	800			570				<u> </u>		L
OREL	ear	k	J	В			e	636			476			b	<u> </u>		<u> </u>
<u>FRU</u>	early	K	J	В				232	333	335	234	309	a		<u> </u>		<u> </u>
TER	earth	K	J	В			e	159			164		a	ļ.	<u> </u>		—
ORIENT	east	k	J	В		Е		550			519	441		b	<u> </u>		
FACIL	easy	K	J				e	311	281	174	307	260	a	-	ļ		—
MANGH	eat	K	J	В	R	_	e	220			222	59	a		ļ		ļ
ekonomi	ecomony	k	<u> </u>			Е								ļ	ļ	_	L
rand	edge	k		В			e	412			399				С		ļ
redakt	edit	K												<u> </u>	ļ		L
eduk	educate	K		В			e	689			608	621			С		
efik	effect	k	J	В			e		311					,	С		—
OV	egg	k	J	В		Е					381	339		b	<u> </u>		
<u>OK</u>	eight	K	J				e	388	400		374	196	a	-	ļ		—
ekskurs	eksursion	k	J				e					290		,	С		├
ELEKT	elect	K	J			Е		398				222		b			<u> </u>

ELEKTR	electric	k		В		Е	1	519			488			Ъ			
element	element	+**		, D		Е		744			700			 			
krizo	emergency							,							c		
dung	employ	k										620			С		
FIN	end	K	J	В			е	125	140	98	127	169	a				
KLOPOD	endeavor	k	J								-	330		b			
energi	energy	k				Е		340		351	335				С		
GHU	enjoy	k	J					561			531			b			
GAST	entertain	k	J			Е		800		395		635		b			
medi	environment	k							367						С		
EGAL	equal	k	J	В			е	525			495			b			
erar	error	k	J	В		Е		800	277			625			С		
nepra	essential	k	J									315			С		
ESTIM	esteem	k	J			Е				154				b			
evit	evade							756				626					L
<u>Ech</u>	even	K	J	В				96	68	170	95	83	a				
<u>eben</u>	even, flat	k		В	R	Е		422			409						L
VESPER	evening	K	J				е	477			514	188		b			
event	event			В		Е											L
AJN	ever	k	J					800	288			522		b			
<u>ChIU</u>	everyone		J					37	133	69	111	57	a				
<u>ChIO</u>	everything		J	В	R			27	30	201	27	100	a				
CHIE	everywhere		J					800			99	710		b			
evidente	evidently					Е									c		
<u>evolui</u>	evolve	k					e					423					L
EKZAKTa	exact							751	323		397			b			
<u>ekzamen</u>	examine	k				Е				315							L
<u>EKZEMPL</u>	example	K	J	В		Е		189	181		193	118	a				
ekscit	excite							608									
ekzerc	exercise	k	J			Е		534			502	623			c		
<u>EKZIST</u>	exist	K	J	В		Е		664	391	285		202	a				
SPERT	experience	K		В			e	599	224		564	369		b			
eksperiment	experiment							770									
esplor	explore	k				Е			335						c		
ekspozici	exposition	k					e										
esprim	expression	k	J					701									L
esting	extinguish	_					e							ļ.,			L
OKUL	eye	k	J	В	R		e	171			176			b			
fabel	fable	_	J			Е								ļ.,	_	<u> </u>	<u> </u>
VIZAGh	face	k	J	В			e	209			212			b			
FAKT	fact	K	_	В	_	Е		304	139		298	91	a	₩	\vdash	_	
faktor	factor	+	H_	\vdash	\vdash	_	_	708						├	\vdash	\vdash	
fabrik	factory	+	J	_		L-	e	754	* * *					1	1	-	L
sens	faculty	1	-	В		Е		42.0	262					L L	\vdash		L
JUST	fair	k	J	-	-	Е	_	430			537			b	\vdash	\vdash	
fidel	faithful	17	J	_	\vdash	<u> </u>	e	22.			25.5	/2-		1.	1		
FAL	fall	K	J	В	\vdash	Е		330			326	425	_	b	\vdash		<u> </u>
fals	false	1.	-	В	-	Е	_	400			205			L L	\vdash	\vdash	├─
FAM	fame	k	J	_		ļ_	e	400	201	105	385	202		b	\vdash	\vdash	+
<u>FAMILI</u>	family	K 1.	J	В	\vdash	Е	_	208	381	105	211	292	a	\vdash	+-	_	\vdash
fartas	fare	k	J				<u> </u>	245			240	464	<u> </u>	\vdash	С	 	+
farm	farm	17	-	В	_	Е		345			340	207		h	\vdash	 	L
PATR	father	K	J	В	R	 -	e	164			69	387		b	1	-	
faks	fax	17	-	_		Е	_	460			444	512	<u> </u>	L L	\vdash		
TIM	fear	K 1.	J	В	\vdash	\vdash	e	463			441	513	-	b	\vdash	\vdash	+
plum	feather	k 1-	J		\vdash	ļ_	e	800	200				-	\vdash	1_	\vdash	L
februaro	February	k	J			Е	_	000	209		0.01			+	С	\vdash	+
palp	feel	k		В		<u> </u>	e	800			261	<u> </u>				Ц	L

SENT	feeling	K	J	В			е	246	183		245	507		ь			
fikci	fiction	1	J	В			e	240	103		243	307		<u> </u>			
KAMP	field	K	J	В		Е		582		411	314	248	a				_
dosier	file	1				Е		302	92	711	314	240					L
FILM	film	K				Е			330			380		b			1
financ	finance	1				Е			330			300		٢			L
TROV	find	K	J		R	L	е	59	95		57	89	a				1
FINGR	finger	k	J	В	IX	Е		495	73		468	- 67		b			
FAJR	fire	k	J	В		Е		247			246	627		b			
firma	firm	K	J	ь		Е		742			240	539		۲			_
FISh	fish	K	J	В		Е		216		277	218	166	a				
TAUHG	fit	k	J	ь		L		210	390	211	483	100	_ u	b			_
KVIN	five	K	J				е	200	370	278	203	75	a	T .			_
fiks	fix	k	J	В		Е		800		270	203	73					
flag	flag	k	J	В		E		733									_
plank	floor	k	J	В		ь	e	301			295	566					L
flu	flow	k	J	В			e	630			293	300					
FLOR	flower	K	J	В			e	401		424	386	540		b			
FLUG	fly	K	J	В			e	361		338	354	540		b			
nebul	fog	k	J	В				501		330	JJ 1	J -1 U		 			L
fald	fold	K	,	В													
SEKVas	follow	K	J	ш			e	168	179		173	218	a				
NUTRAGh	food	1.	,	В		Е		142	377		147	210	- "	b			
PIED	foot	K	J	В	R	ь	e	145	311		150	297		b			
POR	for	K	J	В	IX		-	12	11		11	27	a	-			
PRO	for	K	J	В		Е		12	11		11	160	a				
FORGES	forget	K	J	ь		ь	e					212	u	b			
fork	fork	k	J	В		Е		800				212		T .			L
FORM	form	K	J	В		E		141	249	379	146	307	a				-
forum	forum	1	3			Е		171	247	317	140	307					L
fond	found	k	J			L	е										L
fundament	foundation	K	3			Е											L
KVAR	four	k	J			L	e	153	324	237	158	163	a				
vulp	fox	<u> </u>	J				_	100	321	231	150	593					L
fram	frame			В		Е		743			633	373					L
LIBER	free	K	J	В			e	380	211	248	370	358	a				
frost	freeze	k				Е	Ť	200	211	2.0	3,0	632			С		
fresh	fresh	k	J			Е						631			c		
vendred	Friday	K	J					800				001			c		
AMIK	friend	K	J	В	R			284	271	21	278	220	a				
FRUKT	fruit	k	J	В		Е		574			544			b	1		
PLEN	full	K	J	В			e	253	242		252	206	a				
AMUZ	fun	k	J	В		Е		409			395	524		b			
FUNKCI	function	K					e	741	322	389	634	245		b			
PLU	further	K	J					800				109	a				
gajn	gain	k	J			Е						634			С		
<u>LUD</u>	game, play	K	J	В	R			199	191		202	140	a				
GAS	gas gas	k				Е		508			479			ь			
gaj	gay	k	J			Е											
GhENERAL	general, in	K	J	В		Е		435	166	314	418	189	a				
DON	give	K	J	В	R		е	116	141	90	118	55	a				
DONAC ₀	give	k	J				e	800	-			534		b			
GLAS	glass	K	J	В		Е		324			320			b			
glob	globe		Ť	В		Е		280		427	274				С		
gant	glove			В						,	-/-				İ		
GLU	glue			В		Е		800		348				b			
IR	go	K	J	В	R			77	89	200	73	50	a	Ė			
CEL	goal, aim	K	J					584	-/	358	551	352		b			
CLL	1 5001, 01111	<u> </u>	J					204		220	551	224				Ь	

DI	God	k	J				e	800	177	253				ь			
OR	gold	k	J	В			e	323	1,,,	200	319			b			
BON	good	K	J	В	R		e	78	59	22	74	22	a				
registar	government			В				383	208		372				С		
gren	grain	k	J				e										L
gram	gram					Е				206		637			С		
gramatik	grammar		J				e										L
AV	grandparent	k	J									376		b			
<u>nep</u>	grandson	k	J														L
gras	grease	k		В			e	656			599						
VERD	green	k	J	В			e	249			248	705		b			
<u>SALUT</u>	greet, salute	K	J			Е		800			85	254	a				
GRIZ	gray	k	J	В			e	516			486			b			
<u>GRUP</u>	group	K	J	В		Е		212	129	425	215	246	a				
gvid	guide	k	J	В		Е						382			c		
<u>kulp</u>	guilt	k	J														L
paf-il	gun			В			e	573	342		543				c		
HAR	hair	k	J	В		Е		355			350			b		<u> </u>	
HALT	halt	k	J	В	R	Е		275	286		271	638		b	<u> </u>		
MAN	hand	K	J	В	R		e	162	228		167	264	a		<u> </u>	_	
PEND	hang	K	J	В		Е		635			588	388		b			
<u>OKAZ</u>	happen	K	J				e	322	121		318	115	a		<u> </u>		
<u>FELICh</u>	happy	K	J	В			e	369	347	136	361	465	a		<u> </u>		
haven	harbor	k	J	В						418				<u> </u>			L
chapel	hat	k	J	В			e	514			484			<u> </u>			L
HAV	have	K	J	В	R	Е		21	14	11	20	12	a	<u> </u>			
<u>LI</u>	he, him	K	J	В	R			11	45	87	10	23	a	ļ. —	_	_	
KAP	head	k	J	В	R		e	154	313		159			b			
SAN	healthy	K	J	В			e	98	176		97		a	<u> </u>			
<u>AUhD</u>	hear	K	J	В			e	188	169	222	192	129	a	<u> </u>			
KOR	heart	k	J	В		Е		800		122	302		a	 	.		
hejt	heat						e	338						<u> </u>	С		L
halo	hello	IZ.	,	Б.	n	-		102	1.42	0.4	102	100		\vdash		1	L
HELP	help	K k	J J	В	R	E E		103	142	94	103 497	190	a	b		-	
HERB ChI-TIE	herb	K	J	В	R	E		800			497			10		G	
kash	here hide	K	J	Ь	К		_	737				430		 	С	10	
hierarki	hierarchy	IX	J			Е	e	131				430			+		L
ALT	high	K	J	В		ь	e	163	42	157	168	323	a	 			
HISTORI	history	K	J	В		Е		390	350	163	375	639		b			
FRAP	hit	K	J	В			e	455	340	103	435	337		b		t	
TEN	hold	K	J	В	R		e	143	185		148	164	a				
tru	hole	k	J	В				488			462						L
feri	holiday	k	J									628			С		
<u>HEJM</u>	home	K	J				e	115	213	214	117	310	a				
honor	honor					Е											L
hok	hook			В			е										L
<u>ESPER</u>	hope	K	J	В			e	471	246	9	449	72	a				
<u>cheval</u>	horse	k	J	В				269				371					L
<u>hotel</u>	hotel	k				Е		800				311					L
<u>HOR</u>	hour	K	J	В			e	300	239	238	294	293	a				
<u>DOM</u>	house	K	J	В	R		e	136	339	228	139	229	a				
KIOM	how much		J							319		139	a				
<u>KIEL</u>	how, as	K	J	В	R			14	19	57	13	52	a				
<u>TAMEN</u>	however	K	J						93			112	a				
<u>HOM</u>	human	K	J				e	396	47	52	382	65	a				
<u>CENT</u>	hundred		J			Е		259		290	257	126	a				
<u>MI</u>	I	K	J	В	R	Е		20	5		19	1	a				

	1			ı	ı		ı						1	1		1	
GLACI	ice	k	J	В			e	302			296			b			
<u>IDE</u>	idea	K	J	В			e	236	187	79	296	327	a				
<u>SE</u>	if	K	J	В	R			34	25		34	42	a				ļ
ilustras	illustrate					Е											L
imagas	imagine	k	J			Е						328			С		
TUJ	immediately	K	J					640			590	208		b			
imuna	immune					Е											L
<u>GRAV</u>	important	K	J	В			e	139	244	306	143	162	a				
<u>EN</u>	in	K	J	В	R	Е		6	8	6	5	8	a				
TIEL	in that way	K	J					363			356	56	a				
KRESK	incease	K	J	В			e	238			238	479		b			
inkluziv	inclusive					Е											L
<u>JA</u>	indeed	K	J							293		165	a				
indik	indicate					Е											L
<u>individu</u>	individual					Е		686			506						L
industri	industry	k		В		Е		615									L
INFORM	inform	K	J			Е		376	134	210	368	247	a				
freneza	insane	k					е	800				428			С		
INSEKT	insect	k	J	В		Е	Ė	545			513			b			
ANSTATAUh	instead	K	J	Ť		Ť		283	261		277	414	a	Ė			
INSTRU	instruct	K	J	В			e	368		96	360	544	a				
instrument	instrument		Ť	В		Е	Ť	588		,,,	553						L
intekekt	intelect			۲				200									L
inteligent	intelligent	k				Е		800				468			С		
INTENC	intention	k	J	В		Е		800		331		400		b	 		
INTERES	interest	K	J	В		Е		413	201	49	400	119	a	0			_
INTERN		k	J	ь		E		231	201	49	233	640	a	b			
	internal	_ K	J			E		231			233	469			С		
interpret	interpret	K	J	В		E		272			265	197		b			
PREZENT	introduce		J	В				373			365	197		U			L
invad	invade	I/	,			Е		000		200		220		b			L
INVIT	invite	K	J			Е		800		380		329		В			
faktur	invoice	k		_							***			1.			-
FER	iron	k	J	В	_		e	404	_		389			b			
EST	is	K	J	В	R		_	7	7	4	6	2	a				
<u>GhI</u>	it	K	J		R	_	_	10	10	41	9	35	a				-
januar	January	k	J		_	Е	_		126						С		
sherc	jest	k	J									711			С		T
aligh	join			В			e	569									L
vojagh	journey	K	J	В		Е		645				322			С		
<u>GhOJ</u>	joy	k	J			Е				81		519	a				ļ
jugh	judge	k	J	В		Е	_	800							<u> </u>		L
juli	July	<u> </u>	J			Е	_	—	266					ļ. —	С		<u> </u>
SALT	jump	k	J	В				800			467	504		b	<u> </u>		
juni	June	_	J			Е			312					ļ.	С		<u> </u>
JhUS	just now	k	J		R	Е		69	44		66			b			
GHUST	just, exact	K	J			Е						107		b			
KONSERV	keep, preserve	k	J			Е		667				548		b	<u> </u>		
KILO	kilo	k				Е				181		471		b	<u> </u>		
<u>AFABL</u>	kind, affable	k	J	В		Е		155	202	276	160		a		<u> </u>		
genu	knee		J	В			e								<u> </u>		
<u>SCI</u>	know	K	J	В	R		e	72	48		69	43	a				
	know, be																
KON	acquainted with.	K	J				e	15	278	83	532	104	a				
LABOR	labor	K	J	В	R	Е	۲	91	80	38	90	98	a				
		K	J	В	IV.	E	_		00	20		194	ı a	b	\vdash	1	
MANK	lack	K	J				e	474			452			0	С		
lag	lake			ъ		г	e	618	252	26	575	178	_		Γ_		
LAND	land	K	J	В		Е	-	146	253	26	151	105	a	-	-		
<u>LINGV</u>	language	K	J	В	<u> </u>	L	e	334	265	31	330	157	a				

	Τ.	177	Ι.	Γ_	Ι	_	Ι	T	l	40-				1	I	I	
LAST	last	K	J	В		Е		122		197	124	179	a				
<u>DAUHR</u>	lasting	K	J						106			275	a	1	-		
RID	laugh	K	J	В			_	497			470	501		b			
legh	law	k	J	В			e	563	251		534			_	С		
ESTR	leader	<u> </u>	J	В				448	370		429	193		b			
folio	leaf, sheet	k	J	В			e	619							С		
<u>LERN</u>	learn	K	J	В	R	Е		138	304	23	142	313	a				
preleg	lecture	k										281					L
krur	leg	k		В			e	364			357						L
<u>lecion</u>	lesson	K	J			Е		766									L
<u>LAS</u>	let	K	J	В	R			166	184	289	171	233	a				
<u>LETER</u>	letter	K	J	В		Е		242		16	241	483	a				
	letter of	١.	l .						• • •								т
<u>liter</u>	alphabet	k	J				e	629	269					1			L
NIVEL	level	k		В				487	214			561		b			-
<u>bibliotek</u>	library	k										418					L
LUM	light	k	J	В			e	165	270		170			b	-		
fulm	lightening	k	_											ļ	<u> </u>	<u> </u>	<u> </u>
ShAT	like, prefer	K	J	В	R			446			428			b			
LIM	limit	k	J	В			e	489		317	463	656		b			
<u>LINI</u>	line	k	J	В		Е		118	115		120		a				
lip	lip	k		В		Е		750			637						L
likv	liquid			В			e	596			561						L
<u>LIST</u>	list	k		В		Е		257	150		255	554	a				
AUHSKULT	listen	K	J				e	190		345		288		b			
literatur	literature	K				Е		800		183		384			С		
<u>VIV</u>	live	K	J	В				150	156		155	407	a				
LOGh	live at	K	J				е	680			549	223	a				
ShARGAS	load					е		684			520			b			
LOK	location	K	J	В	R		е	97	164		96	181	a				
ShLOS	lock	k	J	В				527	317		498	596		b			
LONG	long	K	J	В	R	Е		63	104		61	250	a				
RIGARD	look at	K	J	В		Е		86	-		83	131	a				
ASPEKT	look, seem	k	J		R	Е		131		406	135	415		b			
PERD	loss	K	J	В			е	342	337		337	389		b			
lauht	loud	<u> </u>	J	В		Е	Ť	565	337		536	507		Ť			L
AM	love	K	J	В				496	250	77	469	272	a				
shanc	luck	k	,	В		e		466	358	- ' '	40)	595			С		
MAShIN	machine	K	J	В		Е		375	200		367	487		b	<u> </u>		
POShT	mail	K	J	٣		ш	e	800	100		625	70/	a	۲	\vdash		\vdash
precip	main	K	J			H	e	300	100		023	444	и		С		
FAR	make	K	J	В	R		۲	35	32	100	35	31	a		+~		
VIR		K	J	В	R			81	159	100	77	271	a	 		\vdash	\vdash
	man	K		D	K	Б	e		139		11		а	b			
MANIER	manner	_	J			Е	\vdash	676	(2)		4.1	234		"			
MULT	many	K	J	F		Е	<u> </u>	42	63		41	64	a				
map	map	1	-	В		Е	_	332	1.40		328	485			c		
mart	March	k	J	_		\vdash	_		148						С		 -
marsh	march	k	J	_	_	_	e				**-	557					L
MARK	mark	K	J	В		Е		337			333	556	a	<u> </u>	-		<u> </u>
EDZ	marry	K	J	В		_	_	456		103	436	289	a	1	-		
MIR	marvel	K	J	_		_	e	518			487	489		b			
material	material	k		В		Е	_	436			419	385		<u> </u>	С		
maj	May	_	J				e	690						ļ. —	С		
SENC	meaning	k	J	В		Е		460	387		438	575		b			<u> </u>
<u>mezur</u>	measure	k	J	В		Е		351			346						L
VIAND	meat	K	J	В			e	500			473			b			<u> </u>
RENKONT	meet	K	J					417			404	500		b			
membr	member	K	L			Е						314			c		
minac_	menace						е										L
								72									

menci	mention	<u> </u>					e								С		
merit	merit	k				Е									c		
MESAGH	message	<u> </u>				Е		745	197				a		<u> </u>		
metal	metal	k		В		Е		538	17,		506				С		
metr	meter	k					e	800							С		
METOD	method	K				Е	Ť	469			448			b	<u> </u>		
MILION	milion	1				Е		461			439			b			
LAKT	milk	K	J	В			e	397			383	655		b			
MINUT	minute	K	J	В		Е		379			369	195		b			
mis-	mis-		J			Е										g	
MIKS	mix	k	J	В		Е		624			581	437		b			
model	model							660	371								L
MODERNa	modern	k	J			Е		408			394	660		b			
MOMENT	moment	k	J			Е		366			358	214	a				
lund	Monday	k	J					800							С		
MON	money	K	J	В		Е		203	212		206	168	a				
simil	monkey			В								693					L
MONAT	month	K	J	В			е	420	295		407	559		b			
lun	moon	k	J	В			е	287			281						L
PLI	more	K	J		R			48	41		45	46	a				
<u>MATEN</u>	morning	K	J	В	R		e	205			208	251	a				
<u>PLEJ</u>	most	K	J					71	70		68	111	a				
motor	motor					Е		473			451						L
MONT	mountain	K	J	В		Е		293			287	560		b			
<u>mus</u>	mouse		J			Е											L
BUSh	mouth	k	J	В				800			376			b			
MOV	move	K	J	В		Е		111	318		113	296	a				
SINJOR	Mr	K	J		R	Е		114	237		116	185	a				
<u>MUZIK</u>	music	K	J	В		Е		335	216		331		a				
<u>DEV</u>	must	K	J		R		e	93	55	106	92	30	a				
<u>NOM</u>	name	K	J	В			e	579	103		115	94	a				
<u>NACIa</u>	national	K	J	В			e	543			511	279	a				
NATUR	nature	K	J			Е		382			371			b			
PROKSIM	near	K	J	В		Е		161	152		166	267	a				
NECES	necessary	K	J	В		Е		421	346		408	360		b			
kol neck	neck	k	J	В			e	592			557						L
BEZON	need	K		В				160	94	211	165	125	a				Ļ
najbar	neighbor	ļ.,	J				e	726									L
nev	nephew	k	_											<u> </u>	<u> </u>		L
nerv	nerve	<u> </u>	_	В		Е											L
ret	net	 	_	В		_	e	800	113					<u> </u>	<u> </u>		T
<u>neuhtral</u>	neutral	k	Ļ	_	_	Е	_					439		<u> </u>	 	_	L
NOV	new	K	J	В	R	_	e	79	71	1.00	75	86	a	1.	-		-
GAZET	newspaper	K	J	В		Е		655		169	598	636		b			T
jhurnal	newspaper	-		_	_	Е											L
venonta	future, next	1.	,	В	R			(02		22.1	505	505		 			L
AGRABLa	nice	k	J	В		\vdash	e	683		334	585	597		b	\vdash		
MEZ NOVT	middle	K	J	В		\vdash	e	392	207		377	213	a	b	\vdash	\vdash	
NOKT	night	K	J	В			e	167	307		172	280		٦	\vdash	_	
NAUh NE	nine	k	J	Ъ	п	Е		481	400		507	236	a	\vdash	\vdash		<u> </u>
NE DDII	no	K 1.	J	В	R	Е	_	24	16		24	4	a	b			
BRU	noise	k 1.	J	В	n	\vdash	e	800	101		460	608		10			
NENIo	none	k 1.	J		R		e	123	101		125	662	a				L
<u>nek</u>	nor	k	J	D		Б		610	200		572						L
norm	norm	k		В		Е		610	380		573	257		 	<u> </u>		L
normal	normal	k	т	D		Е	<u> </u>	800			250	356		b	С		
NORD	north	_	J	В			e	367			359			10	\vdash		T
naz	nose	k	J	В			e	485							L		L

NOT	note	k		В		Е		263	54		262	684		Ъ			
RIMARK	notice	K	J					203	51		202	301	a	Ť			
novembr	November	k	J			Е			261						c		
NUN	now	K	J	В	R		e	54	78		51	47	a				
nud	nude		J			Е						490					L
nombr	number	k	J				e	113									L
NUMER	number	K	J	В		Е		108	108		108	337	a				
nuks	nut			В			е										L
objekt	object	k	J	В	R	Е		102	119		102				С		
OKUPita	occupied	K	J				e	492			432	338		b			
odor	odor	k		В		Е		628			584						L
<u>DE</u>	of	K	J	В	R		e	2	3	7	2	13	a				
<u>FOR</u>	off	K	J	В	R			106	97	184	106	92	a				
propon	offer	k		В		Е						134			c		
OFIC	office	K	J	В			e	522			491	666		b			
<u>oficial</u>	official					Е						562					L
<u>OFTe</u>	often	K	J	В			e	133	233		137	440	a				
ole	oil	k		В			e	407			393						L
oktobr	Oktober	k	J			Е			81						c		
SUR	on	K	J	В	R		e	13	13		12	114	a				
<u>UNU</u>	one	K	J	В	R		e	4	4		145	34	a				
<u>ONI</u>	one person	K	J				e	800	294		23	20	a				
PROPRa	own	K	J						109			679		b			
<u>NUR</u>	only	K	J	В	R			57	49		55	70	a				
SOL	only	K	J	В			e	327			323	257		b			
<u>OPINI</u>	opinion	K	J	В		Е		800	259			216	a	<u> </u>			
MAL	opposite	K	J	В			e	458	107			40	a				<u> </u>
<u>AUh</u>	or	K	J	В	R			22	18	84	21	68	a				<u> </u>
<u>mend</u>	order	k	J														L
ORD	order	k	J	В			e	224	206		226	316		b			
<u>ordon</u>	order	k	J				e		255					<u> </u>			L
ordinar	ordinary	k	J				Е	669				563		<u> </u>	c		<u> </u>
ORGANIZ	organize	K	J	В		Е		800				137		b	_		 -
<u>original</u>	original	k	_			Е						668		-	-	-	L
ALI	other	K	J	В	R			46	46	48	44	53	a				
EL	out	K	J	В	R			19	23	28	18	48	a	-			
EKSTER	outside	K	J	_		Е		288	375	186	282	138	a	 			-
POSED	own, possess	17	J	В		_	e	119			121	400	a	 			
PAGh	page	K	J	В		Е		158	66		163	493	a	h	-		
DOLOR	pain	k	J	В			e	546			515	(72		b			L
pentr	paint	k	J	В		\vdash	\vdash	759				673			\vdash		L
farb	paint	k	J	B B	-	\vdash		800				-		 	\vdash	\vdash	L
pantalon PAPER	pants	K	J	В		Е	e	176	368		181	265		b	\vdash		+
PARDON	paper	K	J	В		E		800	308		101	205	a	+	\vdash		\vdash
park	pardon park	k	J			E		713				671	ı a	 	С		\vdash
PART	part	K	J	В		E		95	135		94	158	a	1	+~		
FEST	party	K	J	٣		Е		800	133	229	27	538	<u> </u>	ь			\vdash
PAS	pass	k	J	В		E		279	298	22)	273	317		b	1		\vdash
PAG	pass	K	J	В		<u> </u>		402	263		387	147	a	T .	\vdash		\vdash
PAC	peace	K	J	В			e	637	203		509	17/	a	1	t		\vdash
POPOL	people	K	J	۳	R		e	800			507		 	ь	\vdash		\vdash
perfekt	perfect	k	۲		1	Е	Ť	500				390		۲	\vdash		L
PERIOD	period	k				Е		439			422	443		b	\vdash	\vdash	+
PERMES	permit	K	J			Е		666			744	173		b	\vdash		+-
PERSON	person	K	J	В		Е		55	145		52	159	a	Ť	\vdash		\vdash
FOT(O)	photo	K	J	В		Е		169	173	147	174	308	a				\vdash
BILD	picture	K	J	В		١Ť		800		97	301	324	<u> </u>	b			\vdash
ALLIV	picture	117	J	ப	Ь	Ь		000		71	501	J24	Ь	٠,			

	Ι.	17			l							(72		1	Ι.,	l	
pec	piece	K k	J	-			e	575			570	672			c		
amas	pile	+	J	В		-	e	575			578	258		b	10		
PLAN	plan	k	J	-		Е		374			366	298		l b	-		L
plant	plant	k	J	В		Е		217			219			-	-		L
plastik	plastic	k	·			Е		800			605	450			-		L
teler	plate	k	J	В				643			591	453			c		
PLACh .	please	K	J	В		_	e	678			472	391	a				т
<u>plezur</u>	pleasure	K	J	В		Е		800									L L
plus	plus	k	J	_		Е						677					L
posh	pocket	k	J	В		-		709	0.0		621				-		
<u>pint</u>	point	 	_	В		Е		197	98		200				<u> </u>		L
punkt	point .	k	J	В			e	800				253			c		
<u>venen</u>	poison	1		В		-	e	800			(22				c		-
polic	police	k	_			Е		710			622				С		т -
<u>ghentil</u>	polite	k	J	_		Е		734			631			1.			L
POLITIK	politics	k		В		Е		687			607			b			
POPULAR	popular	k				Е		617				392		b	-		т -
<u>eventual</u>	possibly	k	Ļ	_		Е						149	_	-	-		L
<u>EBLE</u>	possible	\vdash	J	В				61	60		59	44	a	-	-		T
afish	poster	\vdash	J	\vdash			\vdash	000						-	-		L
versh	pour	-	J	7		-		800	100		202			b			L
POTENC	power	-		В		Е		289	192		283			В			L
central	power station practice, put					Е											L
PRAKTIK	into	k				Е		431			416	678		b			
PRECIZ	precise	k	J			Е		411				570		b			
prefer	prefer	K	J			Е		641				497			С		
PREPAR	prepare	K	J			Е		688				362		b			
preskrib	prescribe			В		Е											L
prezid	preside	K				Е						393					L
PREM	press	k	J	В				554			524			b			
pregh	prey	k		В			e	560			530						L
PREZ	price	k	J	В			e	707	282		520	341		b			
princip	principle	k				Е						445					L
PRES	print	K		В		Е					515			b			
privat	private			В		Е		800							c		
<u>premi</u>	prize	k					e					571					L
<u>probable</u>	probably			В		Е		266	124		265						L
PROBLEM	problem	K	J			Е		290	87		284	153	a				
procez	process			В		Е			248								L
PRODUKT	product	K	J	В		Е		370	334		362	394		b			
profesi	profession		J			Е						498			c		<u> </u>
<u>profit</u>	profit	<u> </u>		В		Е											L
<u>PROGRAM</u>	program	k				Е		673	130			266	a				L
projekt	project	k				Е											L
protekt	protect	<u> </u>				Е									c		<u> </u>
protest	protest			В		Е						573		ļ.	c		<u> </u>
PROV	prove	K	J	В		Е		428	218		415	499		b	<u> </u>		Ļ
pruv	prove	<u> </u>				Е		800						<u> </u>	_		L
proviz	provide	L												ļ	-		L
PUBLIK	public	K		В		Е		540	236		509	268		b	1		<u> </u>
tir	pull	k	J	В				387			373			_	С		ļ.
<u>pun</u>	punish	k		В			e							ļ			L
PUR	pure	K	J	В			e	479			455	363		b	-		—
PUSH	push	k	J	В		Е		566			538			b	_		<u> </u>
MET	put	K	J	В	R	_		104	131		104	167	a	-	-		₩
kvalit	quality	k		В		Е		763			644	653		-	c		-
kvant	quantity	k			_	Е		607				654			С		
<u>DA</u>	quantity of	K	J		R			75		102		66	a				

	Ι.	Ι.	I _		ı									1.	1		
PLUV	rain	k	J	В			e	309			305			b			
LEV	lift, raise	K	J					663				357		b			<u> </u>
RAPID	rapid	K	J	В		Е		261	267		259	199	a	ļ			.
RADI	ray	K	J	В		Е		468	364		447	680		b			
<u>LEG</u>	read	K	J	В			e	121	102	78	123	180	a				
PRET	ready	K	J	В			e	248			247	299	a				
<u>real</u>	real					Е						681					L
<u>RICEV</u>	receive	K	J	В	R	Е		73	43		70	120	a				
KUSH	recline	K	J					564			535			b			
<u>rekomend</u>	recommend	k	J			Е						366					L
<u>rekord</u>	record best			В		Е		418	321		405						L
<u>varb</u>	recruit																L
RUGh	red	k	J	В		Е		215			217	686		b			
REGION	region	K	J			Е		438			421	342		b			
BEDAUhR	regret	k	J	В				757			641	274		b			
REGUL	regular	k	J	В			e	462				364		b			
RILAT	relate	K	J	В		Е		595			560	173		b			
relativ	relative					Е						574					L
religi	religion	k	J	В		Е		800	382								L
REST	remain, stay	K	J	В		Е		320			316		a				
ceter	remainder	k	J									462			С		
MEMOR	remember	K	J	В		Е		228	189		230	182	a				
lu	rent							800				555					L
ripar	repair					Е		800				684					L
ripet	repeat	K	J			Е		747			636				С		
RAPORT	report	K	Ť			Е		555			525	217		b	Ť		
ripoz	repose, rest	k	J			Е		244	287		243	217		<u> </u>	С		
PET	request	K	J	В			e	499	178		213	252	a		 		
121	resource,	1.	Ť				_	122	170			232					
<u>rimed</u>	means	k	J														L
respekt	respect			В		Е									c		
restoraci	restaurant						e					683			c		
REZULT	result	k				Е		451	303		431			b			
RICh	rich	K	J			Е		331			327	502		b			
<u>RAJT</u>	right	K	J	В		Е		85	285		82	198	a				
<u>DEKSTRA</u>	right not left	K	J	В				124	86		126	420	a				
ring	ring			В		Е		480			456						L
RIVER	river	K	J	В		Е		274			270	397		b			
rok rock	rock			В		Е		325			321						L
rol	role					Е		800				685					L
rul	roll	k	J	В			e	622			579						L
tegment	roof	k	J	В			е	681			604						L
ChAMBR	room	K	J	В		Е		193	326		196	285		b			
radik	root			В				556	343		526				С		
<u>shnur</u>	rope	k										712					L
rond	round	k	J	В			e	278			272				L_		L
vic	row	k	J				e	523			492	706			С		
frot	rub			В			e	800									
rub, forjhetajho	rubbish			В			e									?	
KUR	run	k	J	В	R		e	221	146	344	223	334	a				
sak	sack	k	J	В		Е		591	-		556	687			С		
sankt	sacred	k	Ĺ				e				320	688					L
vel	sail	T		В			Ť	649				300			l		
salajr	salary	t	J	<u> </u>			e	U-1/							С		
salon	salon	k	۲			Е	Ť					398			Ť		L
SAL	salt	k	J	В		Ľ	e	542			510	503		b			1
SAM	same	K	J	В		Е	-	84	76		81	124	a	۲	 		\vdash
SAT	satiated	k	J	В	 	E	e	568	70		539	282	и	b	†		\vdash
		+				Е	6			207	339			b			\vdash
KONTENT	satisfied	K	J		<u> </u>	Е		800		307	l	648		Lυ	<u> </u>		

sabat	Saturday	K	J				е	800							С		
shpar	save	11	,				e	625			582				c		
DIR	say	K	J	В	R			33	79	149	110	33	a		<u> </u>		
skal	scale	11	,	В	IX	Е		510	- 17	177	181	33	_ u				L
apenauh	scarcely	k	J	<u> </u>				310			101				С		
SCIENC	science	K	J	В		Е		333	274		329	226	a		<u> </u>		
BEILIVE	science of	1	,	<u> </u>		L		333	2/7		32)	220					
medicin	medicine			В		Е		800									L
41	scissors cut	1.	Ι,	Ъ				900									L
tond MAR	with	k K	J J	B B			_	800 194			197	486		b			L
SERCH	sea	K	J	ь		Е	e	613			574	256		b			
	search	k	J			E		800			3/4	230			С		
sezon SEGh	season	K	J	В		E		549			518			b			
sekund	seat second	IX	J	В		Е		760			642	690			С		
sekret			,	ь		E		694			611	090					L
sekretari	secret secretary	k		В		Е		094			011	689					L
sekur	secure	K		В		Е		512			482	009					L
VID	see	K	J	В	R	L	e	51	65		482	39	a				
SEM	seed	11	<u>, </u>	В	1		e	494	03		466	33	u	b			
ShAJN	seem	K	J	В			۲	262	125		260	81	a	 			\vdash
MEM	self	K	J	В			e	800	273		204	123	a				\vdash
si	self		<u>, </u>	ם			۲	567	325		204	80	- 4			g	\vdash
VEND	sell, vender	K	J	В			e	406	243		391	187	a			5	\vdash
SEND SEND	send	K	J	В		Е		372	180		364	269	a				
fraz	sentence	1	J	۳		Е		178	100		183	542			С		
APART	separate	K	J	В		Е		537	289	384	505	350		b	<u> </u>		
septembr	September	k	J	<u> </u>		Е		337	203	301	303	330		<u> </u>	С		
<u>seri</u>	series	k	_			Е		670	203			255			<u> </u>		L
serioz	serious	k	J	В		Е		070				233					L
SERV	serve	K	J	В		Е		646	306		592	691		b			
SEP	seven	K	J			Е		399	400		384	219	a	Ť			
plur	several	K	Ť				е		182			340	a				
seks	sex	k		В		Е	Ť	800	290			506			С		
<u>sku</u>	shake			В				601			566						L
<u>akr</u>	sharp	k	J	В			е	490									L
ShI	she	K	J		R	Е	Ť	41	90		40	62	a				
shaf	sheep	k		В				520			-	410					L
ship	ship	K				Е						411					
chemiz	shirt	k	J	В			е	800									L
ShU	shoe	k	J	В		Е		521			490			b			
MONTR	show	K	J					132	188		136	215	a				
FLANK	side	K	J	В	R	Е		147	235		152	325	a				
sign	sign	k		В		Е		586			420	692			С		
SIGNIF	signify	K	J			Е		182	168		187	399	a				
silent	silent	k	J	В		Е		483			458				С		
SIMIL	similar	K	J			Е		50	33		47	448	a				
SIMPL	simple	K	J	В		Е		307	245		303	142	a		Ĺ		
KANT	sing	K	J	В			e	472		257	450	230		b			
SID	sit	K	J				e	306			300	97		b			
SITUACI	situation	K				Е		748	314		398	238		b			
<u>SES</u>	six	K	J			Е		245	400		244	200	a				
HAUhT	skin	k		В				425			412			b			
ChIEL	sky	K	J	В			e	314			311			b			
DORM	sleep	K	J	В			e	403			388	306		b			
glit	slide	k		В			e	800									L
frakas	smash			В													
fum	smoke	k	J	В			e	623			586	633			С		
glat	smooth							644									

NEGh	gnow	k	J	В				308			304	661		ь			
DO	snow	K	J	В	R			44	39	124	43	18	a				
SOCI	society	k	J	В	Λ		e	711	329	124	623	577	a	b			
MOL	soft	k	J	В	R		-	177	186		182	311	a	0			
solid	solid	_ K	J	В	К	Е		577	180		546		а				L
SOLV	solve	k	J	Ь		E		553	384		523	578		b			L
		K		n	n	E				171			_	10			
<u>IO</u>	some	K	J J	В	R			43	38	171	42	73	a			_	
<u>ia</u>	some kind of		J					000	136		51	170				g	
<u>iel</u>	somehow	K	т					800	02	1.61	26	429				g	
<u>IU</u>	someone sometimes,	K	J					316	83	161	36	61	a				
<u>IAM</u>	once		J	В				152	161	299	157	354	a				
<u>FIL</u>	son	K	J	В			e	464		153	442	629	a				
BALDAUh	soon	K	J		R			172	351	179	177	604		b			
SPEC	sort, species	k	J	В			е	506	165		477	449		b			
SON	sound	K	J	В			е	128	280		130		a				
acid	sour			В		Е											
font	source	k	J				e	657	238						С		
SUD	south	k	J	В			e	359			352	450		b			
SPAC	space			В		Е		230	210		232		a				
PAROL	speak	K	J	В			e	276	175		33	77	a				
SPECIAL	special	K		В		Е		252	283		251	302	a				
FAK	specialist	K	J					319	374	270	315	424		b			
spirit	spirit		J			Е		755			640						L
KULER	spoon	k	J	В				800				552		b			
sport	sport	K	J			Е		800									L
PRINTEMP	spring	K	J	В				800			338			b			
STAR	stand	K	J					258			256	303		b			
stel	star	k	J	В			е	580			401				С		
KOMENC	start	K	J	В	R	Е		156	215	116	161	156	a				
ShTAT	state	K	J			Е		256			254	713		b			
<u>staci</u>	station	K	J	В													L
STAT	status	k	J				e	800	171			581		b			
shtel	steal	k					e					517					
shtup	step	k	J	В				393			378				c		
PASH	step	k	J	В								494		b			
baston	stick(wood)			В			e	721			459						L
ANKORAUh	still	K	J	В	R			240		150	88	58	a				
shton	stone	k	J			Е		695							c		
BUTIK	store		J	В		Е		653	344		596			b			
<u>RAKONT</u>	story	K	J	В			e	174	247		179	395	a				
<u>forn</u>	stove			В				800									
REKT	straight	k	J	В			e	352	132		347	396		b			
strang	strange	k	J	В		Е		800			380				c		
FREMD(a)	strange	k	J	В				395		239			a	ļ	<u> </u>	_	
STRAT	street	K	J	В		Е		281			275	400		b	<u> </u>		<u> </u>
<u>FORT</u>	strong	K	J	В			e	264	372	267	263	244	a	<u> </u>	<u> </u>	<u> </u>	<u> </u>
student	student		<u> </u>			Е		682				695		-	С	<u> </u>	—
STUD	study	K	J			Е		170			175		a				<u> </u>
stult	stupid	k	H									320			С		ļ. —
abon	subscribe	k	\vdash					770							<u> </u>	_	L
substanc	substance		<u> </u>	В		Е									1	1	L
SUKCES	success	K	J			Е		720			626	227	a		-		<u> </u>
TIA	such	K	J	В				99			98	117	a	 	-		<u> </u>
SUBIT	sudden	k	J	В			_	310			306			b	-	-	
sufer	suffer	k	J			Е		800							С		
SUFICh	sufficient	K	J	В	R	Е		151	128		156	101	a		-	-	<u> </u>
suker	sugar	k	J	В			e								-	-	L
sugest	suggest			В		Е		626	392		583	696			c		

konven	suitable, be	k		1			e					649			С		
SUM	sum	k	J	В		Е	-	445	338		237	049	a				
SOMER	summer	K	J	В		E		285	336		279		<u> </u>	b			
SUN	sun	K	J	В		E		186	204		190		a				
dimancho	Sunday	k	J	ь		Е		800	204		190		a		С		
SUPOZ	suppose	k	,			Е		381	383			401		b	Ι -		
	1	K	J	В		E			363		5.12	401					L
surpriz	surprise	K	J	В		E	_	572			542			b			L
DOLCh	sweet	k					e	632			586	420		b			
NAGH	swim	 	J	В		-		652	7.4		595	438		b			
SISTEM	system	k	,	В		Е		297	74		291	345		 			
TABL	table	K	J	В		Е		227	00		229	511	_	b			
PREN	take	K	J	В	R			100	99		100	78	a				т
bend	tape	1	-			-			308			528					L
task	task	k	J	_		Е						402			С		
gust	taste	k	J	В				706			619				С		
te	tea	k					e	800				585			С		-
team	team	 				Е		441	301		424			-	С	_	
shir	tear	k	J	_		Е						372		<u> </u>	С		
teknik	technical	<u> </u>	<u> </u>	_		Е		800				698		<u> </u>	С		
TELEFON	telefone	K	<u> </u>			Е		651	302		594		a	<u> </u>		_	
<u>DEK</u>	ten	k	J				e	260	194	177	258	49	a			ļ	
terur	terrible	k	J			Е		740				207			С	ļ	
tekst	text	k	J			Е			275			452			С		
<u>OL</u>	than	K	J	В	R			53	50		50	184	a				
<u>DANK</u>	thank	K	J			Е		703	170	56	517	221	a				
<u>KE</u>	that	K	J	В	R					14		14	a				
TIO	that	K	J	В				9	9		8	7	a			-	
tiom	that many	<u> </u>	J									239				g	
TIU	that one	K	J					800	21		133	9	a				
ties	that one's															g	
LA	the	K	J	В	R		e	1	1	5	1	3	a				
teatr	theater	k				Е						201					L
<u>TEM</u>	theme	K	J				e	424	291		411	121	a	-			
<u>TIAM</u>	then	K	J	В				40	57		39	87	a	-			
TIE	there	K	J	В	R			30	34		30	24	a	1		-	
TIAL	therefore	K	J					486			461	454		b		-	
ILI	they	K	J	_	R			16	26	60	15	25	a	1.			
DIK	thick	K	J	В				454			444	613	_	b			
PENS	think	K	J	В	R		e	87	51		84	151	a				т
soif	thirst	k	<u> </u>	_	_									1			L
<u>ChI-TIO</u>	this	<u> </u>	J	В	R			18	17	50				b		g	
<u>ChI-TIU</u>	this one	 	Ļ								17	32				g	
kvazauh	though, as	k	J			-		20.1			250	436		h	С	-	
MIL	thousand	k	J	_		Е		394			379	183		b			
<u>faden</u>	thread	k	+	В	η.	-		00	100		0.1		_	\vdash	 		
TRI	three	K	J		R	Е		92	199		91	71	a	h			
JHET TD 4	throw	K	J	F			e	633	110		587	286	_	b	-	-	
TRA	thru	K	J	В				74	118		71	321	a	1.			-
JhAUhD	thursday	K	J	F.				000				518		b		-	
bilet	ticket	k	J	В			e	800		265		378		h	С	-	<u> </u>
LIG	tie, to	K	J	F.	ъ.		e	576		265	545	335	_	b			
TEMP FOL	time	K	J	В	R		e	52	53	250	49	116	a	\vdash	 		
<u>FOJ</u>	times	K	J	_				173	207	259	178	128	a	1-			
LAC(A)	tired	k	J	В	_		e	535			503		_	b			
AL WORK AND	to	K	J	В	R			5	2	8	4	16	a			_	
HODIAUh MODGANI	today	K	J	<u> </u>			\vdash	180	327	224	185	144	a	1-	-		
MORGAUh TRO	tomorrow	K	J	В				600	0.5		565	278	_	b	-	-	
	too	K	J	I	R	1	1	82	82	l	78	192	a		1	I	1

CLUBB	1.	1/2	,			l	Ι	20			20	2.47		1		T	
SUPR	top	K	J	В	R		e	39	111		38	347	a				
TUT	total	k	J	D			e	187	154		191		а			<u> </u>	L
tush	touch	k	J	В		Г		547			516			+	_	 	L
turism	tourism	_				Е								+	_	 	L
tradici	tradition	k	т			г	e	725			522			-		 	L
trafik_	traffic	k	J	_		Е		735			532			b	-		L
VAGON	train	K	J	В		Е		611			445	505		10			т
trajn	train	1	J			E		467				587			-		L
trankvil	tranquil	k	J			Е		000				699		-	С	-	-
TRADUK	translate	K	J	_				800	220		220	240	a	1.			
VETUR	travel venture treat	K	J	В			e	344	229		339	406		b		-	
kurac	medically	k	J												c		
	treat, deal	١.															_
<u>trakt</u>	with	k	J				e							1	-	-	L
ARB	tree	k	J	В	R		e	206		391	209			b	-	-	
GhEN	trouble	k	J	В				405	223		390	412		b	-	<u> </u>	
<u>VER</u>	true	K	J	В		_	e	213	75		216	82	a	₩	\vdash	<u> </u>	-
fid	trust	 	J			_	e	800	316					ļ.	c	├	
PEN	try	k	J	В	R	_	e	183	147		188			b	1	<u> </u>	
tub	tube	<u> </u>	J	В		Е		800			540	701			c	-	
mard	Tuesday	k	J				e	800					<u> </u>	ऻ—	С	<u> </u>	
TURN	turn	K	J	В	R	Е		196	296		199		a		<u> </u>	<u> </u>	_
<u>televid</u>	TV	K					e	552			522						L
<u>DU</u>	two	K	J		R		e	49	69	72	46	37	a				
tajp	type					Е						584			С		
onkl	uncle	k	J			Е		511									L
<u>SUB</u>	under	K	J	В	R	Е		120	144		122	174	a				
<u>KOMPREN</u>	understand	K	J				e	286	226	99	280	88	a				
universal	universal	K	J			Е						404					L
universitat	university	K	J			Е			127			348			c		
FRAUhL	unmarried	k	J				e	800		208	310	427		b			
<u>GhIS</u>	until	K	J					140	190	107	144	108	a				
urgh	urgent		J			Е									С		
<u>UZ</u>	use	K	J	В		Е		60	56		58	405	a				
UTIL	useful	K	J			Е		539	356		508	304		b			
<u>valid</u>	valid	k				Е											L
VALOR	value	K	J	В			e	526	264		496	516		b			
<u>DIVERS</u>	various	K	J			Е			221	127		155	a				
vast	vast	k	J			Е		672				588			c		
vegetal	vegetable						e	691			609						L
TRE	very	K	J	В	R			65	62		62	102	a				
VENK	victory	k	J					530			500	457		b			
VIZIT	visit	K	J			Е					489	408		b			
VOCh	voice	k	J	В				265	366		264	592		b			
ATEND	wait	K	J	В	R	Е		433		75	417	228	a				
promen	walk,stroll	k	J				e								c		
MUR	wall	k	J	В			e	416			403			b			
MILIT	war	K	J	В			e	360			353	659		b			
<u>VARM</u>	warm	K	J	В		Е		226				456	a				
AVERT	warn		L				e	800					a				
LAV	wash	K	J	В			e	699			613	553		b			
<u>AKV</u>	water	K	J	В	R		e	62	258		60	413	a				
ond	wave		J	В				442			425						L
<u>VOJ</u>		K	J	В	R		е	58	61		56	459	a				
	way																
<u>NI</u>	way	K	J		R			29	40		29	11	a				
<u>NI</u> VETER		1		В	R	Е		29 313	40		309	458	a	b			
	we	K	J	В	R	Е			40				a	b	С		

PEZ	weight, heavy	k	J	В				294			288			ь			
NU	well well	k	J					274	73		200	141		b			
OKCIDENT	west	k	J	В		Е		501	,,,		474	492		b			
KIO	what	k	J		R			26	36	93	26	28	a				
KIA	what kind of	K	J						72	217		249	a				
RAD	wheel	k	J	В			е	551			521			b			
KIAM	when		J	В	R			28	52	188	28	76	a				
KIE	where	K	J	В	R			70	84	158	67	84	a				
<u>ChU</u>	whether	K	J					277	67	34	54	10	a				
fajf	whistle, fife		J	В			е										
BLANK	white	k	J	В			e	175		352	180			b			
<u>KIU</u>	who	K	J	В	R			32	37	39	32	15	a				
kies	whose		J					348			343				c		
<u>KIAL</u>	why	K	J	В	R			101	105	226	101	130	a				
<u>LARGh</u>	wide	K	J	В		Е		321			317		a				
<u>VOL</u>	will	K	J	В	R			36	29		141	51	a				
VENT	wind	k	J	В			e	241			240	704		b			
FENESTR	window	K	J	В			e	336	319		332			b			
vin	wine	k	J	В		Е						590					L
VINTR	winter	K	J	В		Е		291			285			b			
<u>vish</u>	wipe	k	J				e	800									L
drat	wire	k		В										<u> </u>	ļ		
sagh	wise	k	J	В			e	732			630	447			c		
KUN	with	K	J	В	R		e	15	15	17	14	29	a	<u> </u>			
<u>SEN</u>	without	K	J				e	110	120		112	237	a	<u> </u>			
lign	wood	k	J	В			e	357						<u> </u>	С		
<u>VORT</u>	word	K	J	В		Е		67	174		64	241	a	<u> </u>		-	-
verk	work	K	J			Е		800				148		<u> </u>			L
MOND	world	K	J	_				137	151		140	235	a	<u> </u>			
vund	wound	ļ.,	J	В		Е		800						<u> </u>	c		
volv	wrap	k	Ļ	В				800	386			591		<u> </u>	С		
SKRIB	write	K	J	В		-	e	80	35	2.5	76	132	a	<u> </u>			<u> </u>
JAR ELAV	year	K	J	В		Е		105	96	25	105	67	a	b			
FLAV JES	yellow	k K	J J	B B		Г	e	426	221	1.00	413	426		10			
HIERAUh	yes	K	J	В		Е		250 752	231	160	249 638	19 261	a	b			<u> </u>
<u>VI</u>	yesterday	K	J	В	R			8	12		7	6	a	10			_
JUN	young	K	J	В	K	Е		184	12	104	189	166	a				
NUL	zero	K	J	ь		ь	е	229		104	231	100	_ u	b			
je	ZCIO	K	J					22)		164	231	135		-		g	
,-		<u> </u>	Ť							104		133				-	
sup	soup		J	В		Е		800									
salat	salad					Е		800									
sandvich	sandwich		L	Ĺ		Е	Ĺ	800						L	L		
rost	roast		J			Е	L							L			
riz	rice	k		В			е										
minus	minus	K				Е											
krem	cream							729									
jup	skirt	k	J	В				800									
jak	jacket						e										
jhele	jelly			В		Е											
hospital	hospital			В		Е											
ideal	ideal	k				Е											
bif stek	beef-steak			В		Е		647						<u> </u>	<u> </u>		
BEB	baby			В			e	384						<u> </u>			
bak	bake							800						<u> </u>			
sav	save	k				Е											

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	1-::4										-					
biskvit	biscuit, cracker		J				l e									
abel	bee		Ť	В			Ť									L
akompan	accompany		J			Е										
шинрин	act, deed,		Ť													
akt	document					Е										
aktual	current,					Е										
aktual aldon	present add					E										
				В												
aljhustig	adjustment			В			e	800								
altir	attraction							800								
amar	bitter		τ.	В												
anim	soul		J													
apog	support		\vdash	_	_										_	
aprob	approve		,	В			e	40.4		-			-		-	-
arghent	silver		J	В				484								
ark	arch, bow			В			e									
asekur	insurance			В				800			-					
auhtomat	automatic	-		В		Е	_	800		-	-			-		
auhtoritat	authoritative	-		В		_	e			-	-					
avar	miserly, mean	_	\vdash								-			<u> </u>		
bala	sweep	_	J	_	_		_									
barel barrel		<u> </u>	J			Е										
bari barier, fence								616								
basen basin				В		Е		800								
ben bless							e	800								
benk bench			J				e									
ber berry				В			e									
blok block								696								
bot boot			J	В			e									
bret shelf				В				800								
brust breast		k	J	В			e	800								
bufed buffet			J				e									
buked bouquet			J													
bulb bulb				В		Е		800								
bulten ej bulletin board						Е										
bulk roll			J			L										
gorgh throat			,	В												
grajn grain				В		Е										
GRES grass				В		E	e	385								
GRIMP climb			J	ь			-	668								
gharden garden		k	J	В		Е		447								
harmoni harmony		K	J			E										
hobi hobby	 	\vdash	J	В		E	\vdash	800		 	\vdash			\vdash	\vdash	
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honest honest	 	\vdash	J	D		E	 			 				\vdash		
hont shame		1,-	J	В		-	e	900								
horlogh clock	 	k	J	В	<u> </u>	_	e	800							\vdash	
ident identity	 	\vdash	т	\vdash	<u> </u>	_	\vdash	769							\vdash	
ie somewhere	 		J	\vdash		_	\vdash	800							\vdash	
ies someone's	 	1	\vdash	\vdash		_	\vdash								\vdash	
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impost tax	 	\vdash	\vdash	В	_		_				-			-	\vdash	
impuls impulse	-	-		В		<u> </u>					-		<u> </u>	<u> </u>	<u> </u>	<u> </u>
ink ink		 	J	В		Е					-		<u> </u>	<u> </u>	<u> </u>	<u> </u>
insign badge	ļ	k	J								1			<u> </u>		
insist insist	ļ	ļ.				Е	_			-	-			<u> </u>	<u> </u>	
insul island	ļ	k	J	В		<u> </u>	_	457		-			<u> </u>	<u> </u>	<u> </u>	<u> </u>
juvel jewel				В			e									

kadr cadre, frame	k			Е					1		1		
kajer ehercise	K			ь									
book	k	J											
kapr goat			В										
karb coal	k		В		Е								
kauhchuk rubber						612							
kav hollow, tub					e	570							
kel cellar		J											
kilogram	k												
kilometr	k												
kis kiss	k	J	В	Е		800							
klimat climate						661							
klin incline	k	J	В			702							
kling blade			В										
kolbas sausage		J											
kolomb pigeon,													
dove	_	J											
kom comma	_	J											
komb comb	k	J	В	Е									
kompat compassion	k	J			e								
kompleks		Ť			Ť								
compleh	 <u> </u>		В	Е									
KONEKT connect			В	Е									
konsult consult			ь	Е									
konvink convince	k			E	e								
kord cord	_ K		В	Е	-	532							
kort court	k	J	ь	E		332							
kostum costume	k	J		E									
kot mud	_ K					634							
koton cotton			В			531							
	k	J	ь			331							
kovert envelope	k	J	В		_								
krajon pencil kredit credit	_ K	J	В	Е	e	800							
			В	E		800							
krev burst		J	Б										
kruc cross	1,-	J	В										
kudr sew	k K	J	В	Е									
kupon coupon	k	J		Е		714							
kuragh courage	K	J	В	Е		/14							
kusen cushion			В		_	765							
kuv tub	k	J			e	/63							
kuz cousin	k	ļ ,	В		e	365			-	-			
kvadrat square	K	J	В	H		303				<u> </u>			
kverel quarrel lamp lamp	\vdash	J		Е	e								
lamp lamp	\vdash	,	В	E					 		 	-	
lan wool lang tongue	k	J	В			679							
lang tongue	K	J	В			0/9							
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laud praise	\vdash	J	В	E									
led leather legom vegetable	k	\vdash	В	\vdash	_								
	K	\vdash		\vdash	e	800							
litr liter	\vdash	т			e	800							
log lure	\vdash	J				(71							
magi magic magazen	\vdash	\vdash				674		-					
container, stores		J											
malgrauh in spite													
of	<u> </u>	J											
martel hammer	<u> </u>		В						<u> </u>				
mastr master	k	J			e								

		l .		ı .		1			I	ı	1	l	ı .	
matur mature					Е									
mebl furniture	k	J												
mens mind			В											
mensog lie		J												
menton chin			В											
menu menu					Е									
miel honey		J												
modest modest		J												
mok mock	k	J			Е									
mord bite			В			e	800							
mush fly	k	J												
muskol muscle			В			e	659							
muze museum	k													
muzel muzzle		J												
najl nail		J	В		Е									
nauhz disgust			В		Е									
nadl needle			В											
nod node, knot			В											
obe obey	k				Е									
observ observ		J	В		Е		627							
oksigen oxygen							602							
ombr shadow		J	В											
ombrel umbrella		J	В		Е									
operaci operation			В		Е									
oportun handy,														
convenient			_		Е		800							
orangh orange		J	В		Е		800							
ornami ornament			В			e								
ost bone	k		В			e	517							
pacienc patience	1	J			_	e								
pak pack	k	J	В		Е		800							
par pair	k	J	_		Е									
paralel parallel			В		Е		722							
past paste			В		Е									
persist persist					Е		800							
pik prick	k					е								
pilk ball	k	J				Ť								
pingl pin			В											
pir pear		J												
plac public														
square		J												
plafon ceiling	k	J												
plat flat			В			e								
plet tray			В											
plug plough			В											
poem poem	K				Е		603							
poent point	k													
poez poetry	k													
polur polish			В											
pork pig		J	В		Е									
pot pot	k		В		Е		800							
pozitiv positive					Е	$ldsymbol{ldsymbol{ldsymbol{eta}}}$	800							
progres progress	k				Е		758							
promes promise	k	J			Е									
propozici phrase							731							
proz prose			В		Е									
prun plum		J												
prunt lend,	1,-	,												
borrow	k	J		L		<u> </u>			<u> </u>	 <u> </u>	<u> </u>	<u> </u>		

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pulvor powder			В		e	800						
pump pump			В	Е		800						
rab rob		J										
rajd ride		J		Е		437						
rang rank grade	k											
rav delight ravish		J										
rat rat			В	Е								
raz razor shave		J			e							
regh king	k	J										
rekompenc			В									
reward reprezent			ь									
represent						723						
revu review	K			Е								
rezerv reserve				Е								
ribel rebel				Е								
rifuz refuse				Е								
rikolt harvest												
ritm rhythm			В		e	749						
roman novel	k											
roz rose	k	J		Е								
rubrik rubric	k			Е								
sabl sand		J	В			432						
sap soap			В		e	800						
sauhe sauce				Е								
scen scene			В	Е								
sekret secret			В	Е								
serpent snake		J	В		е							
signal signal						692						
silk silk			В	Е								
simbol symbol						614						
SINCER sincere.				Е								
soldat soldier	k	J			e							
songh dream		J				764						
sovagh savage		J			e	312						
spegul reflect,	,	,										
mirror	k	J										
spez turnover	k			_								
spic spice	k		_	Е								
stamp stamp			В	Е								
stang pole				-		717						
stomak stomach	,		В	Е								
strech stretch	k		В	Е		715						
substantiv noun						724						
surd deaf		J		_								
shal shawl		J	_	Е								
shel shell shmir smear,				_	\vdash	739						
snmir smear, spread				Е								
Shok shock			В	Е								
shovel shovel			В	Е								
Shpruc spurt				Ē	e							
shrank cupboard	k	J										
Shrauhb screw			В			800						
shtal steel			В			541		1				
shtof stuff fabric	k		Ť	Е		J						
shtop stop, plug				Ť				1				
clog			В	Е								
shtrump stocking	k	J	В			800		<u> </u>				
suld debt			В	L								

1 1/ 1 11	1	1	T ,	l	1			501	1	1	1		l			
shultr shoulder		+	J					581								
shvit sweat		+	J			<u> </u>										
tablojd tabloid	-	+	J			Е										
tapish rug	 	+	J	\vdash	_	<u> </u>										
tarif tariff		+	H_	_		Е										
tend tent		+.	J	_		_										
teori theory		k	-	В		Е		800								
tern sneeze		+	<u> </u>	В												
toler tolerate		+				Е										
tondr thunder		+		В		Е										
tord twist		+-		В			e	800								
traf hit the goal		k	J													
tram tram		-	J			Е										
trem tremble		_					e	800								
tritik wheat		+	<u> </u>					638								
tromp cheat deceive																
tualet toilette						Е										
turist tourist		k				Е										
tur tower			J													
ung fingernail			J	В			е									
valiz brief case			J													
vapor vapor, steam			J	В		Е										
verb verb			Ť	Ī				700								
verm worm		1		В		Е										
vers verse				В		Е										
vigl vigilent		k	J			Е		800								
vilagh vllage		k	J			Е		414								
vitr glass		k	J			Ė	e									
vokal vowel		1						587								
vost tail		k		В				433								
zon zone, belt			J			Е										
zum buzz, hum,																
zoom		+	J													
chia			J													L
etos	atmosphere		<u> </u>					665								
dors	back	k	J													
urs	bear		J									703				
Char-o	cart		$oxed{oxed}$	В			e									
debet igi	charge	\perp						685								
<u>bord</u>	edge	k	J				e									L
cifer	figure						e	378								
hazard	hazard					Е										L
domagh	spare, look after	k	J													
formik	ant			В				716								
ampleks	range			В			e					523				L
cerb	brain			В				704								
<u>difekt</u>	damage	1		ĺ		Е		<u> </u>								L
citron	lemon	1	J													
fizik	physics	1	Ť	В		Е		768			1					
LEIK	piijoioo					L		, 50					 <u> </u>	·	!	

For more info go to http://www.esperanto.net/

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