Abstract

Education-For-All (EFA), understood as an ‘equal education opportunity for every single person on the globe’, is a challenge of this century that cannot be met without advanced information technologies and instructional computing. One question we must address is whether EFA is a force that will advance social welfare and equality on a global scale or institutionalize differences in social class outlook. EFA comes to achieve its principled reality only when the former is the case. This paper clarifies that a possible factor that may affect EFA negatively will be found in linguistic disparity, whose effect is characterized here as the ‘linguistic divide’.

The paper nonetheless reports that the emergence of automatic portable multilingual mediators (translators and interpreters), which I wish to call ‘autolinguals’, is forthcoming at an affordable cost in the very near future, and that logically this should overcome the linguistic divide.

Given that EFA is a technical reality, the paper then directs its discussion to implications for the future of schooling.

2. Eminence of English as a global lingua franca

In reality, however, education with structured information and knowledge as its base is not possible without a unified form of language. For geographical-historical and socio-cultural reasons, English has achieved its pre-eminent status as a global language in nearly all areas of human social activities [3], including international politics, economic activities, academic conferences and data bases, and the media. Under the given ‘linguistic diversity’, that is, among more than 6,000 languages of the world [2], English has also been functioning as a lingua franca paramount [6]. English, in other words, is a global lingua franca for education transmitted via a worldwide information network. The more the eminent status of English advances, the more is spent for mastering English. This is what is happening in the nonnative-English world.

3. Three Ds of linguistics

Countries in the nonnative-English world are investing tremendous amount of social cost, time and money for English. Take Japan as an example. English is virtually a mandatory subject of higher education required not only for proper curricula but also for various levels of entrance examinations; consequently, it is also a main subject taught in cram-schools throughout the country. English is now seriously considered as a subject of elementary education. Even out of school, English is a big subject; to be promoted business men are often required to achieve scores of at least 80% on the TOEIC (Test of English for International Communication); it is the current fashion to teach English to preschool children. The issue of
English becoming Japan’s second official language, though controversial, keeps coming up among opinion leaders. Various education materials for English occupy good parts of the book stores. One estimate reports that the annual social cost spent on English is never under 30 billion dollars in Japan alone. Such a situation is more or less true in many other non-native-English countries.

Despite such zeal and efforts for mastering English, it is unrealistic to expect that the nonnative-English world achieves a level of competence similar to that of the native-English world; hence the ‘linguistic disparity’. If English is taught early enough, powerful bilingualism may be achieved, and we may expect it to be a possible solution. However, this expectation may even be questionable as we see in California Spanish-English bilingual education which, everyone seems to agree, did not work very well (ABC World News Tonight 6/1/98), even in the English speaking world.

Here, linguistic disparity seems unavoidable, and education delivered in the form of English via a worldwide network will institutionalize differences in social class outlook between those who have good access to English and those who have not, if no solution comes forth; hence the ‘linguistic divide’, akin to the notion of ‘digital divide’ (e.g. [5]).

It is worth noting that half of the world population will be competent in English by the year of 2050, by one estimate. Ironically, however, because of its overwhelming success, English will be diversified into many dialects that are mutually unintelligible. I suspect that this direction is evidenced by such examples as Singlish spoken in Singapore, Ebonics spoken in African-American communities, and Spanglish spoken in Hispanic communities.

Three Ds of linguistics—i.e. linguistic diversity, linguistic disparity, and linguistic divide—seem to remain recurring problems to any issue of globalization.

4. Emergence of autolinguals

Under the emergence of other advanced information technologies, the linguistic divide as a possible barrier to EFA may largely disappear. Among such notable technologies advancing day by day, I report the two which came to my immediate attention. For one, the Universal Networking Language developed by the UNL project at the United Nations University in Tokyo is a possible global lingua franca of computers which mediates between any language pairs. It was announced in 1997 by The Nikkei (Japan Economy) Newspaper that by 2006, UNL would be able to handle any language of about 180 countries and areas of the world. It would no longer be a dream that papers written in French are directly read in Swahili on the Internet.

For another, portable multilingual automatic interpreters with listening competency will be a genuine breakthrough for real time language processing. Such a technology looks forthcoming, at the Advanced Telecommunications Research Institute (ATR) in Kyoto, for example, reminding us of the now widespread cellular phones.

It is likely that the emergence of affordable, portable machine interpreters and translators, characterized here as ‘autolinguals’ of this century, is just a matter of time, perhaps 5 to 10 years in the future. Linguistic disparity against the nonnative-English world will then disappear, and the idea of EFA becomes a practical reality.

5. Implications for the future of schooling

Application of EFA to the future of learning leads us to ask about the effect on the notion of school in the traditional sense: If ideal tutoring with free access to information and knowledge is available to everybody, can schools be unnecessary and hence eliminated, at least in principle? This is a question which involves philosophical value judgments for education.

The answer may not be all positive if we remember some neglected goals of education: to nurture creativity, to understand how worlds and humanities are connected, to develop emotions. Often, if not always, these aspects of education cannot be met without human contact. We may even articulate that human contact itself is the goal of education. It seems, then, that the advanced educational technologies used for EFA and local schools where teachers and students meet face to face will play complementarily shared roles of education in the future.

References