Research Statement

My name is Sane M Yagi. My research interests have two major tracks: Language Teaching and Computational Linguistics, the first being what I partly trained for in my master’s program and what I earn my bread and butter doing, the latter being what my doctoral program qualified me for and what took my fancy. Below I will outline the major themes I researched.

Language teaching is most fascinating primarily because the reward is immediate, especially at lower levels of language competence. What makes language teaching even more captivating, for me, is the introduction of computer-aided teaching methodology because it enables me to teach language more effectively.

Writing is a productive skill that is hard to teach. Although the written product is what is often analyzed and evaluated in the context of language teaching, the process of giving thought linguistic form and composing that together to create text is truly enthralling. For almost forty years, many a language teacher found it more effective to help learners in the very writing process than in the written product; it is there that they could find sources of writing problems. Software that can record keyboard and mouse activity and capture all that takes place on the computer screen are capable of unraveling some of the mysteries of the writing process; they leave to conjecture little but what is cognitive. Language learners, curriculum designers, and teachers can utilize such software to have insight into the learning process and to subsequently improve their knowledge delivery and skill training techniques.

In the paper entitled ‘Using Tracking Software for Writing Instruction’, Al-Salman and I attempted to explain how tracking software can influence the methodology of writing instruction. We briefly examined the process and post-process approaches to assess their viability, explained the concept of tracking software, proposed a methodology for the adoption of the tracking technology, and then discussed the pedagogical implications of these issues.

To pursue this theoretically enlightening endeavor further, Rababah and I have just submitted a research grant application to AlFaisal University proposing that we use the teaching methodology characterized in the paper above for one semester in an empirical experiment to answer three questions:

* Can tracking software be used to explore the cognitive activity associated with EFL learners’ text production?
* In what ways can tracking software reflect the thinking process associated with written production?
* To what degree can tracking-software-aided writing instruction improve EFL students’ linguistic performance?

The written language of EFL students attracts my attention at many levels. For example, I recently explored with AbuJaber and Al-Ghalith the spelling phenomena in EFL written graffiti. A topical analysis of this graffiti has also been conducted to find out from a sociolinguistic point of view how social phenomena affect the written production of EFL students. A few years earlier, I guided Arab students’ EFL teachers on how to get them to recognize where to place the full stop and when to start a new paragraph, so I wrote ‘Sentence and Paragraph Correlates for EFL Writers’. Furthermore, I studied with Shaaban, the collocational competence of EFL learners by analyzing samples of their writing. Fareh and I analyzed the compositions of hundreds of students focusing on one syntactic issue, parallel conjunctive relations, to highlight how EFL writing can become more native-like. Exploration of why English conjunction is problematic for Arab students led me and Yunis Ali to study at a pragmatic level wa, the Arabic equivalent of the English coordinate conjunction, substantiating the claim of native language negative interference. In fact, I came to the conclusion that one of the primary problems with Arab EFL learners’ writing is the lack of composition skills in their native language, so this resulted in a paper on how the Arab conceptual world affects Arabic-speaking EFL writers and led me subsequently to work with Arabic specialists to produce two textbooks in Arabic that teach the clientele of EFL programs how to write in Arabic.

Action research did not motivate me to systematically examine my writing instruction alone; it induced investigation of my reading and speaking instruction as well. In one language development course in the 1990’s, students had problems with speed reading, so I taught them using classical speed reading techniques but was not happy with the procedure, so I developed in conjunction with Harous a computer-aided reading software that taught all reading skills but focused on speed reading and vocabulary development. This resulted in a paper and a software patent. Speaking is even more challenging to teach than reading because it is a productive skill that requires not only knowledge of vocabulary and sentence structure but also knowledge of some subject matter. It additionally requires that the speech production be made impromptu. Students I had once in a conversation course did not have much information to talk about, so I thought of teaching them in the lab and getting an audio cassette to whisper ideas in Arabic as they delivered English monologs; this developed into an experiment which was reported in a paper on a methodology for using simultaneous interpretation tasks for EFL speaking fluency. But this is artificial; it is all role-play, so I thought of introducing some authentic contexts that would motivate the student to express their thoughts in English because they want to be understood rather than because the teacher asked them to talk. The idea of joining my students in an online community was the solution. After four years of participation in Soliya’s synchronous video-conferencing program, Mustafa-Awad and I obtained a research grant from the University of Jordan to evaluate the benefits of video-conferencing to EFL learning; this resulted in several papers that measured learners’ fluency, evaluated their oral production phonetically, lexically, and syntactically, and assessed the cultural impact on these learners.

Like language teaching, Computational Linguistics gives me the satisfaction of immediate return too. Through research, I develop products with practical application. Seeing how your algorithm results in getting a machine to perform what only a human being is capable of is the best compensation for those hundreds of hours that one would spend reading, planning, and experimenting. Arabic is my language of choice for computational linguistic research because this is a language that has not received the attention it deserves, therefore, it is easy to make a contribution that stands out.

My computational linguistic research started out in my doctoral program, where I developed a system for assessing simultaneous interpretation by standard acoustic signal processing techniques. Using some stochastic techniques, the Acoustic Research Center at Auckland University and I patented a software suite of four tools: One allows a global signal analysis based on correlation and covariance, another allows content-based discourse analysis, and two allow a speech-events-centered analysis differing only in the degree of human intervention.

English-Arabic simultaneous interpretation gradually led me to computational morphology, the first stage to the computerization of Arabic. I started out by studying how traditional morphological knowledge can be presented in a computer-congenial manner (cf. Yagi, 1994), then I studied morphologically the Arabic words as presented in a standard monolingual dictionary (cf. Yagi & Harous, 1999) to classify them statistically and to propose an algorithm for computerizing morphological analysis (Yagi, 2002). This computerization, however, makes huge demands on disk space and processing speed, so a method had to be developed for compactly storing and efficiently accessing words’ morphological properties and roots, hence the paper on ‘T-Code Compression for Arabic Computational Morphology’ (cf. Yaghi, Titchener, and Yagi, 2003). Afterwards, a systematic methodology had to be developed for the generation of Arabic words (Yaghi & Yagi, 2004; and Yagi & Yaghi, 2007). To evaluate the efficiency of our methodology, I discovered a need for the development of golden standards for Arabic verb morphology against which morphological systems can be compared; hence, the paper by Yagi and Yaghi (2006).

My work on morphology gradually led me to lexicography, after all the two disciplines share their concern for words. As Arabs pride themselves in being pioneers in lexicography but Arabic lacks an etymological dictionary, I took it upon myself to rally scholars for the research and development of such a dictionary. Harous, Yagi, and Yaghi (2010) developed a piece of software for the compilation of such a dictionary but this project was too ambitious. The tool we developed could work as a stand-alone application and could work well on the web but if too many users accessed it simultaneously it started to crawl. The project is still alive and graduate students are being recruited for it but progress requires more participants and more funding.

I am currently working on the semantics of morphological patterns, for the purpose of augmenting the lexicography tool with a utility that would automatically plug in a sentence stem appropriate of the morphological pattern of a dictionary entry, to help the human lexicographer capture that aspect of the meaning of the entry.

Statement of Teaching Philosophy

My name is Sane M Yagi. I have been teaching at university level for the past twenty eight years. I taught multilingual, multicultural, and multiethnic students from America, Europe, the Middle East, New Zealand, and South East Asia, students of freshman, sophomore, junior, senior, master’s, and doctoral levels. I taught, at postgraduate levels, semantics, sociolinguistics, science translation, and a special topic in computational linguistics. At undergraduate level, I taught, in addition to the English language skills, ESP courses like English for tourism, English for journalism, English for business, technical English, etc. Below is a brief account of the philosophy that my practical experience led me to develop.

I believe that students are like children, they can see through us. If we are genuine, they know and if we fake it, they know. That is why wholehearted commitment to teaching is a crucial element in our success as teachers. Do not take a course if you do not like the subject.

Class dynamics are important. If the teacher finds a group of students in his or her class with poor motivation, their class dynamics will suffer and they may fail to give their best. I would in such a case be positive and make it my priority to motivate the students. This can be done in multiple ways but the most important in my mind is what we do as teachers, perhaps we need to change our technique or to appeal to a variety of learning styles. Perhaps we need to use our parental instincts and establish a rapport with the unmotivated to find out the cause of their disengagement and to address it instantly if it relates to us or guide them to where they can seek help. When students see that we care, they will try harder to get involved in our classes.

Some teachers are so focused on knowledge that they come across as being uncaring. A teacher ought to be sensitive to the fact that they are dealing with human beings with emotions, with aspirations and insecurities. All these have consequences for the learning process that the teacher cannot afford to ignore.

I also believe that in language learning there is little value in meta-linguistic knowledge; therefore, it is critical that the teacher make all their teaching skill-oriented. All that goes on in the language classroom must be motivated by skill development and by the conversion of skill to behavior. There is no value in teaching students the past perfect if students do not know when it is appropriate. Students must learn how to read, write, listen, and speak efficiently without having to know the subjunctive, the present perfect continuous, or the third conditional, to cite but a few terms in our meta-linguistic jargon that a teacher must avoid.

I am aware of my limitations, so I never view myself as the fountain of knowledge. I do not have all the answers. If I come across something I do not know or if I am asked a question I am not sure of the answer to, I will tell my students, but I will also show them how to find out. In fact, a good teacher will not readily give answers; they will instead ask simpler questions that would gradually lead the student to the answer. The most memorable lessons are those learned from experience. So, learning by discovery is more valuable than learning by being told.

It is my conviction that my role as a teacher is to guide the learner, to open avenues, to guide and advise. I am very much like a swimming coach who interferes only to save life.