

# Developing Language Skills Through the Backdoor of Pseudoscience

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## Student Profile and Learning Situation

The school is a rather traditional Women's Junior College, with all first year students required to take an 'Oral English' class, taught by native speakers. In the past, such classes were textbook based, with each instructor having complete freedom to use any conversation textbook of their preference. Until recently, there was little indication of a systematic approach to curriculum, and the only common, identifying descriptors of these classes were 'conversation' and 'native speaker'. In the past three years, however, an attempt has been undertaken to consolidate sub skills and give a communicative direction for the other courses. The Oral English classes now serve as the engine for our 'Event-Driven' curriculum (EDC). Rather than teach specific material, a goal for that class is to try and tap into the kind of student mindset that would more likely be seen outside of class and preparing for extracurricular activities such as the annual fall culture festival or events and activities associated with their various circles and clubs. The primary assumptions are that when those students are autonomously engaged in a task with their peers, they are psychologically permeable to optimal learning conditions, and these conditions can be approximated in the classroom. The instructors in these classes serve more as coaches, managers, and mediators whose job is to gradually guide the students through the necessary steps for them to develop the individual or collective autonomy necessary for the students to choose their own material, create and practice their own presentations, and perform at a semester-ending event in front of a real audience which includes guests from off-campus. These classes meet once a week for ninety minutes, and will meet approximately 15 times during each semester.

The instructors' typical approach to time management has to be adjusted because there is no fixed material or lesson plan to be covered. Rather, several student-generated lesson plans will be simultaneously evolving. Because these students are in their first semester of their first year of college, they need a little

time to get to know each other and form into groups of their own choosing. My own experience of choosing groups for them to save time appeared to be counter-productive in the long run.

In the eyes of the international community, Japan reaps the benefit of a particular stereotype ... particularly, the relatively natural ease with which Japanese are able to suppress their own individuality in order to foster the collective autonomy, and harmony, of the group. But a recent statistical study showed over half of the women who entered a company in a full time capacity, quit within three years, and this was mostly due to difficulties in getting along with colleagues. It is easy to imagine a similar percentage of males would do the same if they had the same options. The instructor must take great care in exercising authority over group formation. One-shot exercises in which the group's goals can be set and achieved within a single lesson plan are relatively safe for randomized groupings or instructor-instigated groups. But any long-term projects should allow the students the freedom to determine their own groups or risk a high possibility of dysfunctional groups ... or at the very least, isolated individuals.

Rather than specific lesson plans, a greater priority would include fostering individual responsibility and collective autonomy, and raising awareness of the communicative strategies required for a specific audience. There is minimal explicit teaching of language form or function. The students are expected to acquire specific skills from the remainder of their classes, which are taught entirely by Japanese faculty, many of whom are working as part-time instructors.

#### Organizational / Institutional Limitations

A major problem is a lack of agreement and/or awareness among the full-time teachers of their responsibility to provide the linguistic building blocks geared to helping the students prepare for their presentations. Weekly meetings, informal discussions, and the periodic nature of school wide events allowed the instructors to eventually reach some kind of consensus, but assent was largely for the sake of expedience. While there is some indication of a renewed interest in experimental approaches, many classes, including some of my own, tend to present materials in a traditional manner and adhere to old, familiar pedagogical patterns and assumptions, with little or no reference to other classes, particularly, the native speaker fronted Oral English classes. In effect, for most of the other teachers, as well as students, the event is little more than an extra-curricular addition, an end of semester party that is only partially pedagogically justified. And with that assumption also latent in most students' heads, the native speaking instructors, including myself, have had considerable difficulty in getting the students to focus on the upcoming event.

One particularly surprising observation was the fact that the mere presence of native speaking guests did not seem to sufficiently motivate the students during the initial open-class week, about two thirds of the

way through the spring semester of 2006. Many of the student performances had to be coaxed from the students, and even then, some of those performances appeared to develop no further than reading/recital exercises rather than a communicative event. But a scant one month later, the performances at the department-wide Spring Festival were strikingly superior in quality and showed much more commitment from the students. All this proceeded with no significant changes in the number of native speaking guests. At first, it appeared that the sheer number of audience members, and perhaps the fact that a real stage was used, rather than the smaller, joint-class amphitheaters used for open class week. But upon overhearing discussions among office staff, students, and teachers ... it became apparent that the crucial variable was the intervention of the two secretaries from the English Department. Counter to a native speaker's intuition as to how American college students would react, the Japanese college students seemed to flourish under institutional intervention and involvement as represented by the secretaries' hard work in organizing the student practices. An interesting further study would be to compare the affects of immediacy and involvement from the instructor on student performance, with the effects on student performance through perceived institutional immediacy and involvement. However, it remains problematic as to whether the quality of institutional immediacy and involvement can be operationalized.

#### Finding a balance

The foreign instructors are all male, all over 50 years of age, and all with limited Japanese language skills, thus bringing into question the degree of immediacy and involvement which can be expected of those instructors. Certainly, many of the identities that can be assumed to be common among the instructors are not easily accessible by the students's still developing sense of empathy. The instructor-student relationships are even more unstable because the systematic approach to teaching language has been superceded by the need to prepare for an event. Instructors seemed pleased with the increased opportunity for a high level of immediacy and involvement with the student groups. But in those cases where a few students' degree of commitment might have been questionable, rather than taking the students to task — and taking the risk of unfairly alienating some students with threats of failing grades, these native-speaker instructors tend to be more indulgent than they would have been in a more traditionally structured course. It is exceedingly difficult for the native speaking L2 instructor to know when they have applied just the right amount of facilitative anxiety, and in just the right way.

#### Too little structure, not enough empathy

By far, the most obvious stumbling block preventing successful completion of the students' task was not a failure of group dynamics, but an insufficient vocabulary. Incidentally, a coordinated effort with another instructor teaching extensive reading is our first attempt to address the particular problem of insufficient vocabulary.

Regarding insufficient vocabulary, a common pattern could be seen evolving in how students make use of their cell phone access to on-line dictionaries. Looking up single vocabulary items is not so much a problem as is the problem of students running entire sentences through on-line based translation software. If not for instructor intervention, most students would blithely practice and memorize their lines of gibberish with complete confidence that somebody, if not the other students, understands them. The majority of the audience members at the presentation events are fellow classmates, so of course, the audience cannot be expected to follow more than the first couple of words. Rather than a 'communicative' event, most students find themselves either speaking or listening in a rather ceremonial way. I am still amazed that students assume any of their performances in English should merely serve a ritualized, or ceremonial function, rather than for communicative purposes. Inevitably, I have to sit down with each group and get them to simplify, paraphrase, and sometimes translate the English they have generated ... first, to insure they, themselves, know what they are saying, and then to get them to have a little sympathy for the audience who will not have the luxury of time and dictionaries to catch each low frequency vocabulary item that comes from the performer's mouth.

#### A modification of EDC

The purpose of this paper is to provide a pedagogical justification and heuristics for an ongoing, fall semester class, the explicit linguistic purpose of which is to increase the students' working vocabulary, and to become more fluent with a limited vocabulary set. The affective purpose remains the same as Oral English classes ... to foster responsibility and autonomy, and encourage their sense of communicative empathy with each other. In order to accommodate both purposes, students will continue to work in groups of their own choice, and, by the semester's end, groups will be working towards completion of a task in front of a real audience. But the course will also be designed around a pre-determined theme that will provide the content from which the instructor can design lesson plans and make tests. An additional curricular purpose is to pilot applicable vocabulary building techniques that may be passed on to the part-time, native instructors. If the goals of this class are particularly well met, there will be some consideration to apply the course design to Oral English classes next year. That is, Oral English classes would include some predetermined themes so as to allow instructors to return to a more systematic approach to building students' communicative skills. I chose for the theme of this pilot class 'Aromatherapy' for several reasons.

First, for the past five years in both in Japan, France and in most Anglo cultures, aromatherapy has been a popular hobby with connections to the 'new age lifestyle'. The class will be held on Saturday mornings, a first period class, which is not a popular choice of class time for most students, so the choice of topic had to take special priority in order to appeal to intrinsic motivation among the students. The choice of aromatherapy as a theme should provide enough motivation to allow the instructor to maximize the

opportunity to use L2 as the language of instruction.

Second, it lends itself to similar processes and activities that would be expected in the Oral English classes. The proposed approach would have the instructor fronting an introductory lecture/workshop in which the topic is briefly introduced, and the expectations of the students are laid out. The following class meetings would have the students spending part of their time in semester-long groups whose ultimate purpose would be to prepare, package, and present their own recipe of aromatic oils to a panel of guests who are neither acquaintances, nor members of their own class, and have the guests award prizes for the best blend and/or presentation. Therefore, the class will be powered by a similar dependency on group work and goal setting theory, as in the spring semester, Oral English classes.

A third reason for choosing aromatherapy is because of the unique relationship between the olfactory sense, memory, and emotion (Smith, 1999).

As early as 1935 (Laird, 1935), researchers attempted to verify the common folk wisdom now referred to as the Proust phenomenon (Chu & Downes, 2000) because of a particular passage in one of his books in which odors seem to elicit particularly vivid or emotional memories. A context-dependent memory study (Pointer & Bond, 1998) showed the stronger effectiveness of odor, compared with visual cues, for retrieval of items memorized under the same stimuli. A similar study (Herz 1998) comparing odors with verbal, visual, tactile, and musical stimuli, found that although encoding did not show variability, odors affected retrieval in such a way as to make memories more emotional. Evoked memories differed qualitatively and in detail from memories evoked by other cues (Chug & Downs, 2002), and other research (Herz & Schooled, 2002) showed that naturalistic memories evoked by odor were more emotional than memories elicited by other cues. Recent research has so overwhelmingly demonstrated the importance of olfaction to memory and emotion, that patients suffering from posttraumatic stress disorder (PTSD) are now suggested to make use of odors as part of regular therapy and routine assessment of intrusive memories (Vermonter & Beemer, 2003). Brain scans have verified a shared physical location being simultaneously stimulated for olfaction, memory, and emotion (Norris, Chen, Zhu, Small, and Jacopo, 2004).

Why not smell?

It seems as if most of the other senses are well documented as aids to memory in language education: from the tactile aspect of total physical response, to the importance of sound in suggestopedia and jazz chants, to visual cues such as diagrams and pictures, and verbal mnemonics or L1 orthography. But olfactory-cued memory does not seem to be part of the literature of second language education. Why does there seem to be so little information on the relationship between olfaction and second language education?

One reason is because smells are especially difficult to identify and classify (Koster, 2005). The latest estimate of distinct smells that we can distinguish is close to 10,000 (Smith, 1999). Recently, in a one-day workshop, I passed around what is probably the most popular essential oil from the aromatherapy repertoire, lavender, but nobody could guess what odor it was. And even if they had, assigning a verbal code to the smell is not easy, even in the L1.

Another reason that smell has not made its way into pedagogy the same way the other senses do, is because age, experience, and heredity all account for differing perceptions of the same odor. As we get older, a large percentage of people lose their sense of smell, although we do not normally consider them handicapped. The good news is that olfactory receptors are among the rare nerve cells that have the ability to regenerate (Maylor, Carter, & Hallet, 2002). Cultural differences certainly account for a great deal of variation in perception (Kobayashi, Saito, Kobayakawa, Deguchi, & Costanzo, 2006). While American children love their licorice, Japanese will curl up their noses. Kusaya or shuuto are even more dramatic examples of the role cultural experience would play on perception of smell.

Despite the variation and difficulties in assigning a verbal code to what is essentially a pre-semantic response in the brain, enough basic research has accumulated to see the beginnings of a new science of aromacology, a legitimate science, as opposed to the recent proliferation of the 'new-age-folk-wisdom' overtones of aromootherapy (Smith 1999). A popular recent example of such applications would be the well documented role of pheromones in animal behavior, which may, or may not, be scientifically applied to the perfume industry.

#### A divergent line of research

The relationship between the sense of smell, memory, and emotion seems to have several potential directions that might be applied to learning vocabulary. One obvious direction would be to explore the potential to combine olfactory-cued stimuli with humanistic techniques for retrieving autobiographical memory, such as 'my most embarrassing moment' or 'being scared'. A similarly creative use of language generated by values-clarification techniques and positive psychology, or the explicit practice of literary techniques could be enhanced with certain odors. One could easily imagine the possibilities of matching odors with the content of a more traditionally textbook organized class, for example, 'at a restaurant' for a functional syllabus, or 'Christmas in Germany' for a thematic organization of text. Perhaps the extended plasticity and regenerative nature of olfactory receptors could turn out to be an unexpected advantage to older language learners.

#### Back to motivation

What if anything, has this to do with aromatherapy? As earlier stated, this is a popular theme that should

appeal to students' interest. Most Japanese are at least familiar with the term, although few can be expected to be aware of the science of smells. The L1 schemata for aromatherapy, including a plethora of shared terms with the L2, should be enough to kindle an interest in the class. A combination of applied goal setting theory and empowering the students to organize themselves to meet the semester-ending task should help sustain enough motivation.

With one of the explicit goals being to increase vocabulary, the weekly accumulation of word cards, containing words they choose to help them complete their tasks, will provide once source of feedback and an easy way to gauge progress. I am assuming the initial size of most first year Junior College students' vocabulary is small enough, that I think it would be reasonable to use the general service list of 1000 frequently most used words as the minimal target for all students. There would have to be some words from the academic list and a few, very low frequency items, but the concrete immediacy of their task should motivate them.

I plan on dividing the target vocabulary into a few functional domains: a) the historical origins and geographical distribution of some of the plants from which the oils are derived, b) process – including making, mixing, using, and storing the oils, and c) the physical and emotional benefits of using a knowledge of aromatherapy. Spread though within these three categories should be enough items to justify teaching a little about affixes for the Greek and Latin derived items. The relatively clear boundaries of each subject domain should be a relief to most learners in the previously free-of-content Oral English class. These domains derived from a pre-selected theme provide a concrete, feasible goal for both number of vocabulary items to learn, and situation in which to practice fluency.

Synergistic approaches for increasing encoding opportunities would include having students involved in small projects and homework assignments aside from their major group goals. For example, the previously mentioned lexical areas could be reorganized by the students in the form of mind mapping, or regular maps, charts, and diagrams, for that matter.

Another synergistic approach I am currently using in public speaking classes is to record to my computer, either pod-casts downloaded from the Internet, or my voice reading a passage. Once the digitized sound is on my hard disk, it is relatively easy to customize CDs for each student and create CD jigsaw information gap exercises. Homework assignments and quizzes could be burned to the same CD in a separate track. I break up the passages into single sentence tracks, which allows students easy random access and the capability to hear that single sentence repeated as often as they prefer. This effectively extends 'lecture' time beyond the official class hours, and gives them yet another 'accessory', in addition to their oils.

The applications and permutations of what can be done to create learning and communication opportunities with this theme are nearly endless. There is a lot of potential for dramatization and creating scenarios, for example, therapist and patient, or shopkeeper and customer. And there are enough vocabulary items that should be common to all groups so as to warrant weekly review and consolidation exercises such as crossword puzzles, matching games, or blindfold 'smell' tests.

#### The Holistic Attitude

Despite the sheer pleasure and novelty of using aromatherapy as the subject matter, I don't think any course can be taught with complete objectivity or value free. The mere choice of theme reveals much about values. Aromatherapy is an excellent course to bring in higher-level abstraction and common sense. The placebo effect and post-hoc reasoning are examples of concepts I try to get students to discover when I use pop culture or quasi-scientific content in my classes. The ongoing process of self-discovery and a scientific, critical attitude in the tradition of a liberal arts education are the deeper values I hope to instill. I make sure that students realize aromatherapy should be taken with a grain of salt, and it is relatively easy to design demonstrations that highlight the questionable claims of many practitioners. Valuable information on the potential for scam in aromatherapy can be found at [skepdic.com](http://skepdic.com) (Carroll, 2006) and [quackwatch.org](http://quackwatch.org) (Barrett, 2001).

In a class of students who all speak Japanese, I am not averse to using the L1. My overriding purpose for using L1 is to instill a sense of an educational community by letting the students know exactly why I make various choices for materials and their application. Being able to admit to students when an approach or some materials are just not working seems to engender respect for the instructor's honesty. Students can be very generous and forgiving if they know the instructor is struggling to do his or her best. I find many students are even more interested in English after they hear a little about the applied education psychology that goes into making a lesson. In a class of lower level speakers, I am particularly sensitive to avoiding any hint of condescension due to their marginal language skills. A big reason for adapting, simplifying, or creating my own materials is due to the mistaken assumption of beginning level second language skills being correlated with low level intelligence, as reflected in so many materials for the education market. Perhaps, this is also the original impetus for an Event-Driven Curriculum ... to provide an educational framework that tries to nurture and challenge the student at the deepest levels of identity.

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