

Teaching Students to be Creative and Reflective Teachers in Their Disciplines

Douglas J. Wulf

Department of English, George Mason University, Fairfax, USA

Email: dwulf@gmu.edu

Departments of colleges and universities should prepare their students for careers in their disciplines, to include discipline-specific teaching careers. This paper describes a number of procedures followed by the linguistics program of George Mason University's Department of English to prepare students for careers in teaching linguistics and English as a second language and as teacher researchers. These procedures, such as crowdsourcing strategies to generate creative pedagogical options and careful documentation to encourage reflection on teaching experiences, are designed to promote valuable habits for future teaching. Although specifically describing the policies of the linguistics program, many of the practical ideas described could be adapted for other discipline-specific teacher training.

Introduction: The Need for Teacher Training

Departments of colleges and universities should prepare their students for careers in their disciplines, to include discipline-specific teaching careers. In some cases, there is an acute need for teacher preparation. For example, the Chemistry-Teacher Education Coalition (CTEC) has highlighted the shortage of highly-trained science teachers in the United States and implores, "... we are asking college and university chemistry departments across the U.S. to include teacher preparation as part of their mission and curriculum" (CTEC, 2016).

Minimally, departments must effectively mentor teaching assistants and graduate-student instructors. Beyond understanding a discipline well, conveying teaching expertise in that discipline to the next generation of teachers is a challenge in and of itself. Skills are acquired through practice, to include teaching skills, and although trial-and-error teacher preparation can sometimes eventually work, it is certainly more expeditious and less painful to provide guidance.

Considering the linguistics program of George Mason University's English Department, it is possible to note how coursework, a practicum, and internship opportunities have prepared students for discipline-specific teaching careers. The program is involved in three ways with preparing students to teach in their disciplines: 1. preparing instructors of linguistics, 2. preparing instructors of English as a second language (ESL), and 3. preparing students to become teacher researchers. Although looking only at this linguistics program, certain features of what the program does in this regard may be directly applicable or partially adaptable to other discipline-specific teacher training in other departments.

Preparing Instructors of Linguistics

George Mason offers the only Ph.D. in linguistics in Virginia, administered by the Department of English's linguistics program. Among other career options, this Ph.D. prepares students to become teaching professors of linguistics. Doctoral students in the program thus benefit from opportunities to learn to teach linguistics. Building a teaching CV is also important for eventually finding a teaching job.

Three policies have significantly helped the doctoral students in this program to develop as linguistics teachers: 1. gradually building competence via faculty and peer assistance, 2. archiv-

ing course materials (crowdsourcing), and 3. feedback via classroom observation of developing teachers.

Gradually Building Competence via Faculty and Peer Assistance

Each semester at George Mason, an undergraduate introduction to linguistics, LING 306 *General Linguistics* (with an enrollment of 50 students), is offered. A linguistics faculty member teaches the twice-weekly lecture sections, but two doctoral students each take half the students and teach separate once-weekly recitation sections. As these are doctoral students, the material is elementary. Yet, knowing linguistics well and knowing how to teach it well are not the same, and the doctoral students can sometimes be apprehensive about teaching linguistics to undergraduates.

Discussing the teaching of mathematics, Ball, Hill & Bass (2015, p. 15) ask, "Do teachers need knowledge of advanced calculus, linear algebra, abstract algebra, differential equations, or complex variables in order to successfully teach high school students?" They conclude that there is rather "a professional knowledge of mathematics for teaching." Likewise, a doctoral student in phonology cannot expect in-depth understanding of prosodic patterns in Altaic languages to be directly relevant when attempting to explain to undergraduates fundamental concepts such as what allophones and phonemes are. For this, it is often helpful to remember to employ a helpful analogy, which is to pretend that one allophone is Clark Kent and the other is Superman, though both are the same person, which is to say, the same phoneme. There is both knowledge of linguistics for teaching and knowledge of how to teach it that are distinct from knowledge of linguistics itself.

LING 306 is a gentle introduction to teaching linguistics. Doctoral students observe each lecture section, allowing them to think about the content to be taught and how it is taught. Then, it is only necessary for them to lead their recitation sections in further practice. In addition, since LING 306 is an overview course, student instructors get practice teaching in all subdisciplines of linguistics (i.e., phonetics, phonology, syntax, semantics, pragmatics, language acquisition, etc.).

Each year, an attempt is made to have only one student instructor move out of teaching LING 306. The other stays on to serve as the "veteran" 306 instructor to help a new, inexperienced student instructor, who is assigned to teach 306 from the incoming doctoral students. By the following year, that inexpe-

rienced instructor has now become the veteran, and the previous veteran cycles out of teaching 306. Thus, in addition to guidance from the faculty instructor, each novice instructor also receives peer assistance from a veteran student instructor during their first time teaching the course.

The dynamic of having two student instructors plus a faculty member who all coordinate with one another has also proven very beneficial for introducing creativity and innovation to the classroom. Two or three heads are often better than one, and if the faculty member is supportive of student instructor input, student instructors can often come up with creative ways of teaching material and new uses of technology, among other helpful ideas.

Successful recitation instructors for LING 306 then advance on to more challenging teaching, such as teaching other undergraduate courses solo. Most typically, this is LING 307 *English Grammar*. Enrollment permitting, it is also possible, depending upon the area of expertise of the doctoral students, to teach other undergraduate courses, such as LING 486 *Syntax I* or LING 490 *Generative Phonology*.

Under the supervision of a faculty member serving as the instructor of record, student instructors can even administer graduate-level distance education courses, such as LING 523 *English Phonetics* or LING 582 *Second Language Acquisition*.

This gradual and carefully followed trajectory that is designed to help the doctoral students gradually build confidence, competence, and responsibility in discipline-specific teaching within the program has proven very successful. Indeed, because of her excellent track record as a graduate student instructor, one of the new Ph.D.s in linguistics was immediately hired on to teach in the capacity of an adjunct instructor, allowing her to further enhance her teaching CV.

Archiving Course Materials (Crowdsourcing)

Of enormous help to developing instructors of LING 306 is the archiving of instructional materials developed both by faculty and doctoral student instructors for reuse and adaptation. A growing repository of handouts, examples, homework assignments, and quiz and exam questions are kept from which developing instructors can draw. Student instructors are tasked to produce classroom presentations, assignments, quizzes, and exams, but they need not start from scratch to do so. Of course, the 306 faculty instructor reviews materials before distribution to the class. This crowdsourcing of materials has proven so successful that there are plans to expand this to archive materials for other courses that the doctoral students also teach.

Of course, it is desirable that instructors teach in creative and innovative ways, but levels of creativity differ from individual to individual. Also, even a highly creative teacher may only manage to come up with a few creative touches or innovations in any given semester and may not be capable of dreaming up something outstandingly ingenious for each and every class session. However, by promoting and facilitating the crowdsourcing of ideas and materials, a certain amount of creativity can be “borrowed” from one’s predecessors.

It might be thought that crowdsourcing could also promote complacency by allowing instructors just to reuse whatever has been done previously. In fact, in some cases, inexperienced instructors may indeed reuse materials directly because they do not feel confident enough to innovate. Yet, after gaining confidence, instructors begin to look with a critical eye on what has been done previously and often reach the conclusion that improvements are possible and desirable. Developing teachers are often eager to try to do things their own way and to attempt

something new. Thus, a repertoire of creative teaching indeed tends to accumulate gradually over the semesters. Again, this is all accomplished with the supervision of the faculty instructor.

Feedback via Classroom Observation of Developing Teachers

Not surprisingly, the LING 306 faculty instructor observes one class session taught by each 306 recitation section instructor each semester. Similarly, each semester, one class session of any class taught by a doctoral student instructor is observed by a faculty member in the linguistics program. The teaching is evaluated and feedback is entered on a feedback form uniformly adopted for this purpose. There is space to add comments as necessary.

Feedback on teaching is also provided verbally to developing teachers, and the evaluation scores rating their teaching from their student course evaluations are also carefully considered. This not only helps to ensure a measure of quality control on the training of doctoral student instructors, it also affords an opportunity to provide constructive feedback on teaching, especially if any problems need to be addressed.

In providing feedback through this formal procedure or even informally at other points in the semester, the faculty mentor can consistently encourage developing teachers to attempt to be reflective about their own teaching. For example, an excellent way to begin giving feedback to a developing teacher is to pose the question, “So, how do you think your lesson went?” Thus, as with encouraging creative teaching, reflective teaching can be promoted in developing teachers by a faculty member who places value on it and who actively inquires after it from those being mentored.

Preparing Instructors of English as a Second Language

The linguistics program at George Mason trains students to teach English in the United States and abroad to non-native speakers of English. This is done through a graduate-level teaching English as a second language (TESL) certificate, earned either in face-to-face or in distance-education format, or through an undergraduate-level TESL minor. Five characteristics of the TESL program have conspicuously contributed to its success: 1. foundational coursework in theory; 2. training in effective classroom observation and teaching; 3. reflective documentation; 4. crowdsourcing for learning; and 5. further teaching involving in-person observation with feedback.

Foundational Coursework in Theory

Unlike the doctoral students in linguistics who arrive with in-depth knowledge of linguistics, students in the TESL program often have little linguistic understanding of what they hope to teach: language. Thus, the TESL program requires the following theoretical coursework as a foundation: LING 520 *Introduction to Linguistics*, LING 522 *Modern English Grammar*, LING 523 *English Phonetics*, and LING 582 *Second Language Acquisition*.

Although TESL programs exist that omit this sort of foundation, the program strongly supports the notion that language teachers should not only learn teaching methodology, but should also acquire sufficient knowledge about the nature of language itself and how it is acquired. Effective instructors need knowledge both of methodology and of content.

Training in Effective Classroom Observation and Teaching

In combination with instruction in linguistic theory, practical training in TESL is implemented via the two-semester sequence LING 521 *Applied Linguistics: Teaching English as a Second Language* and LING 525 *Practicum in ESL*. LING 521 serves as a methods and materials of language teaching course, designed to prepare students for LING 525, the full semester-long practicum.

LING 521 has three objectives: 1. To help students connect theoretical knowledge with teaching practice, 2. To familiarize students with a wide range of excellent pedagogical options (i.e., teaching methodology), and 3. To give students actual and effective experience with classroom observation and teaching.

Of these three, the third objective is the most critical. Just as there are TESL programs that do not provide a theoretical foundation, there are also programs that do not provide real teaching practice. However, as Brandt (2006, p. 33) advises, "To get the best return from your investment, reject any course that has no practical component. After all, would you employ a 'teacher' who had never taught?"

Crucially, LING 521 contains a mini-practicum, designed like the full 525 practicum, but in miniature. An ESL instructor and ESL class are found for each 521 student. The 521 student then observes the class for two hours to get some impression of the class, the teacher, and the students.

Significantly, 521 students are carefully taught how to observe effectively, something they typically do not know how to do well in advance. Although classroom observation of teaching can be extremely valuable, it is not sufficient only to create opportunities to observe, as there are two common pitfalls that can undermine the benefit of an observation. First, observers can become absorbed in the content of the host instructor's lesson rather than examining the host instructor's teaching, the classroom dynamic, and other matters of pedagogical significance. Secondly, observers may slip into the mode of writing up a job performance review on their host instructor, which is both an unhelpful approach to observing and an inappropriate thing to do to someone who has been kind enough to allow the observer to be a guest in the classroom.

These natural but problematic tendencies are dealt with in two ways. First, students are given an explicit etiquette for their observation, adapted from Murphy (1992). The etiquette used in 521 (which is also substantially reused in 525) is provided in the appendix to this article. The etiquette reminds 521 students of certain fundamental realities of the observation arrangement. For example, it is noted that the observer is entering another person's workspace where the students must not have their learning disturbed by the presence of a developing teacher. Thus, Murphy (1992, p. 223) provides such guidance as "An observer is a guest in the teacher's and the students' classroom. A guest in the classroom should not attempt to take away even a modest degree of classroom responsibility, control, or authority from the classroom teacher or L2 students." Murphy adds, "A guest's purpose for visiting is not to judge, evaluate, or criticize the classroom teacher; it is not necessarily even to offer constructive advice."

In addition, 521 students must write an observation report that explicitly connects their classroom observations with language teaching principles described in Brown & Lee (2015). These same teaching principles as well as the methodology taught in 521 then guide each 521 student in completing approximately 20 minutes of teaching as a guest presenter in the same host classroom. Each 521 student then receives feedback

from his or her host instructor on the teaching experience via a feedback form especially designed for that purpose. As with the observation, the 521 student must also reflectively document the teaching experience with a report.

Reflective Documentation

As noted, students must submit reports that require reflective documentation of the observation and teaching experiences. In addition, for every pedagogically oriented reading selection for the course, 521 students generate reflective journal entries that do not summarize readings but rather indicate how the reading influences their own teaching philosophy or could potentially impact their future teaching.

In the 525 practicum, developing teachers likewise document their experiences regularly so insights are not overlooked or forgotten. In both 521 and 525, the course instructor replies to each reflective journal entry at length.

Crowdsourcing for Learning

Additional teaching experience occurs within the 521 classroom itself using a crowdsourcing strategy. Portions of the content for the course are not taught by the 521 instructor. Rather, material is divided up and distributed to the students in the class, who are tasked to learn the material and teach it in class to the other students.

LING 521 students are not permitted just to parrot back content via reading a prepared summary. Rather, they must actually use methodology and a compelling presentation style to teach the 521 course material effectively. The course instructor provides detailed feedback on in-class teaching to include presentation factors such as voice volume, eye contact, and more.

In addition, students in LING 521 are tasked to provide other students in the class with examples of higher level, lower level, and grammar activities. By crowdsourcing input in this way, the class itself generates a fairly sizeable repertoire of useful classroom activities. Crowdsourcing is once again shown to be a useful way to promote varied and creative teaching, what Brown & Lee (2015) describe as "enlightened eclecticism." By getting small contributions of creative teaching from many people in a strategy reminiscent of brainstorming, a repertoire of creative ideas and examples can be generated that the entire group can potentially draw from as needed.

Further Teaching Involving In-person Feedback and Observation

Having been trained in 521 as effective classroom observers and fundamentally competent language teachers, developing language teachers can go on to effectively observe and gain additional teaching experience in the full 525 practicum. The full practicum requires 36 hours of classroom observation over a semester along with six experiences of teaching ESL students. The practicum also involves in-person observation and feedback on their teaching both from the host instructor and the practicum professor.

This individualized attention and feedback is effective in refining teaching skills in the discipline. The linguistics program also provides longer-term teacher preparation via teaching fellowships set up jointly with Northern Virginia Community College (NOVA), allowing for two advanced Master's degree students, who are also pursuing the TESL graduate certificate, to teach ESL classes at NOVA for one or two semesters with

the guidance of a NOVA faculty mentor and a faculty coordinator from George Mason's linguistics program.

Each year, the linguistics program also hosts a TESL job fair to provide new TESL instructors, to include George Mason students who have recently graduated or who are due to graduate from the TESL program, access to regional and national employers of TESL instructors.

Preparing Teacher Researchers

Lastly, the linguistics program prepares doctoral and advanced master's degree students for careers as directors of language education programs, researchers in language pedagogy, and as language teacher researchers. To meet this need, the courses LING 782 *Second Language Acquisition II* and LING 882 *Language Acquisition Seminar* have increasingly come to be used to train students in conducting research inside the language classroom to investigate how to improve the practice of language instruction itself.

Graduate students of linguistics with a second-language acquisition focus thus cast the eye of a formally trained linguist on such difficult issues as the teaching of tense in English or the teaching of paraphrasing. They then consider how current language teaching methodology in such specific areas might be improved.

Then, via pilot studies approved through human subjects review, these graduate students look for evidence from data collected within actual ESL (or other second language) classrooms to see if their attempts to improve language instruction have been successful.

Theoretical linguists, even those researching theories of second-language acquisition, can often work and publish out of view of classroom language instructors and language learners, sometimes doing research that does not take into consideration the real, practical challenges faced in actual language teaching and learning. By promoting graduate-level research on classroom instruction by theoretically trained linguists, it is hoped that a more effective bridge between theory and practice and between researchers and those in the language classroom can be built.

Conclusion

Academic departments should address the challenge of preparing their students for careers in discipline-specific teaching. The various practical steps taken by George Mason's linguistics program in this regard have been described, and many of these steps may be directly applicable or partially adaptable for other programs of various kinds. The procedures followed have been designed to encourage creative teaching (e.g., crowd-sourcing strategies) and reflective teaching (e.g., reflective written documentation of observations and teaching).

Acknowledgements

The author thanks all the host instructors for LING 521 and LING 525 who have done so much since 2003 to help prepare so many individuals who now work as teachers of ESL.

References

Ball, Deborah Loewenberg, Heather C. Hill, & Hyman Bass. (2005). *Knowing mathematics for teaching: Who knows mathematics well*

enough to teach third grade, and how can we decide? *American Educator*. Fall, 2005, 14-17, 20-22, 43-46.

Brandt, Caroline. (2006). *Success on Your Certificate Course in English Language Teaching: A Guide to Becoming A Teacher in ELT/TESOL*. London: Sage Publications.

Brown, H. Douglas, & Heekyeong Lee. (2015). *Teaching by Principles: An Interactive Approach to Language Pedagogy*. (4th ed.). New York: Longman.

CTEC Website. (2016). Retrieved March 19, 2016, from <http://www.acs.org/content/acs/en/education/educators/chemistry-teacher-education-coalition.html>.

Murphy, John M. (1992). An etiquette for the nonsupervisory observation of L2 classrooms. *Foreign Language Annals* 25 (3), 215-225.

Appendix: Observation Etiquette

Each LING 521 student is provided an observation etiquette before entering a language classroom as an observer. This etiquette is here reproduced below:

In LING 521, you will be visiting actual ESL classrooms, observing them, and (sometimes) participating in the class. It is crucial that your visits not cause complications for the ESL instructor and students. The following are some guidelines for classroom observations.

The source for these guidelines is: Murphy, J. M. (1992). An etiquette for the nonsupervisory observation of L2 classrooms. *Foreign Language Annals* 25, 215-225.

I have added notes to them pertaining to LING 521 as required. These guidelines were kindly provided to me by Thomas Nowalk of NOVA.

Etiquette Guidelines for the Nonsupervisory Observation of L2 Classrooms

BACKGROUND

1. The observation/visitation of classroom teachers is serious business; it should not be approached casually.
2. Classroom observations are not easy for the classroom teachers involved.
3. Knowing how to teach a second language (L2) and knowing how to observe L2 classroom dynamics competently are two very different abilities. An experienced L2 teacher is not necessarily an effective or well-informed observer.
4. Learning how to observe in a manner acceptable to all parties involved is a slowly developing activity. It takes time, careful reflection, personal tact, and creativity. Visiting and visited teachers should expect that this ability will develop, change, and improve over time. (NOTE: But you should endeavor to get it right the first time!)
5. An observer is a guest in the teacher's and the students' classroom. A guest in the classroom should not attempt to take away even a modest degree of classroom responsibility, control, or authority from the classroom teacher or L2 students.
6. A guest's purpose for visiting is not to judge, evaluate, or criticize the classroom teacher; it is not necessarily even to offer constructive advice. (NOTE: This is perhaps the most important guideline. Don't be a critic writing up a review!)
7. One option is for the guest to envision his/her role as that of an interested visitor, someone who has entered into a long-term process of learning to observe.

8. One potentially useful, though provocative, theme of the literature on L2 teacher education suggests that observing others as they teach provided invaluable opportunities for “visiting” teachers to learn to see more clearly in order to increase awareness of their own classroom practices. Reflecting upon what we see other teachers do in classroom settings sometimes helps us become more aware of our own classroom behaviors.

PROCEDURES

9. Visitors should contact the teacher well in advance whose class they would like to visit; a minimum of 24 hours in advance is recommended. This is a crucial procedural concern that prospective visitors need to work out with the classroom teacher directly. Some teachers may prefer significantly more than 24 hours’ lead time. (NOTE: We will give our host instructors much more than 24 hours’ notice.)

10. A visitor who is planning to observe a class should arrive in the classroom a few minutes ahead of time.

11. The classroom teacher should always reserve the right to say, “No,” when a nonsupervisor inquires into the possibility of visiting his/her class. A teacher who withholds permission on one occasion might change his/her mind at a later date.

12. Visitors need to discuss with the classroom teacher how long they are planning to stay in the classroom. It is important to negotiate a suitable length of time that is acceptable to both the visitor and to the classroom teacher. Once the teacher and visitor have agreed upon a suitable length of time, the visitor should stay in the classroom for at least that long. (NOTE: Observation time is noted in the syllabus. You can observe for a longer time with the approval of the classroom instructor.)

13. If something unexpected comes up and the visitor is not able to observe a class at the agreed upon time, the visitor needs to explain this to the classroom teacher at his/her earliest convenience. If the visitor has said that s/he is coming to the class, and then s/he does not show up, classroom teachers sometimes feel rejected. It is a visitor’s responsibility to keep the classroom teacher informed.

14. Once having entered a classroom, the visitor should try to be as unobtrusive as possible. If possible, s/he should try to “blend into the woodwork.”

15. If an L2 student in the class asks the visitor a direct question (e.g., What are you doing here? Are you a teacher, too?), the visitor should answer as briefly as possible. The visitor should not monopolize classroom time. It is important for a visitor to bear in mind that s/he is not a regular member of the class. Visitors should not initiate or pursue conversations unnecessarily.

16. The role of the participant observer is a special exception to numbers (14) and (15) above. This role can be adopted but only if it is initially suggested and encouraged by the classroom teacher directly. In this regard, a general rule of thumb is for the visitor to wait for an unsolicited cue from the classroom teacher. (NOTE: Express to the instructor that you are open to participating or assisting in any way, if this would be helpful. Otherwise, you will just watch and learn.)

17. A visitor should be appreciative and polite. At the earliest opportunity, s/he should thank the classroom teacher for having made possible this generous opportunity to visit an L2 classroom. In order to be unobtrusive, it is often necessary to ex-

press this appreciation in a setting other than the classroom setting.

18. A visitor who is taking written notes or collecting information in some other way should do this as unobtrusively as possible. The visitor must make sure that the teacher and students are comfortable with any procedures s/he may follow for data collection (e.g., audio or video taping).

POST-VISITATION

19. It is imperative for visitors to keep whatever impressions they have of a visited teacher’s style, effectiveness, or personal demeanor to themselves. These impressions should remain private and confidential. (NOTE: Do not include such matters in your journals and Blackboard discussions.)

20. Visitors should explain to the classroom teacher that his or her name will not be used in any discussions with other people. Visitors should let a visited teacher know that their policy is to keep any direct reference to teachers, in either formal or informal settings, anonymous. (NOTE: Leave the name of your instructor out of your journals and Blackboard discussions.)

21. If visitors produce any retrievable artifacts (e.g., written notes, audio or video recordings) during a classroom visit, the classroom teacher should have access to these materials. (NOTE: Relevant journals and Blackboard entries will be made available to the mentor instructors. It is sometimes possible to discuss things that went wrong in a class, but this must be done with good judgment. For example, if the bulb in an overhead projector burns out, it might be helpful to note what to do in such a situation, especially if the instructor managed to deal with such a mishap effectively. Please be exceptionally tactful.)

22. Even well intentioned feedback to classroom teachers often misfires. Visitors need to bear this point in mind during their post-visitiation interactions with teachers. (NOTE: You are not there to evaluate the classroom teacher. Don’t do it.)

23. For this reason, visitors should monitor carefully and keep in check the natural inclination to offer advice. Unless visitors are observing in the capacity of a professionally trained supervisor, their role is not to assist, evaluate, or judge. (NOTE: Your purpose is to observe ESL teaching methodology and think about how to apply this to your own teaching. You are not there to evaluate the instructor’s teaching. By the way, you are also not there as an ESL student, so don’t lose yourself in the content of that day’s grammar lesson. You should focus on the methodology in particular.)

24. At times, discussions and collaborations between a visitor/observer and a classroom teacher are appropriate and useful. In fact, teachers sometime expect and even request feedback from classroom visitors. The point is that such exchanges should only be pursued if they are initially suggested and encouraged by the classroom teacher. It is not the visitor’s place to initiate or overemphasize the role of such exchanges.

25. Bearing items (23) and (24) in mind, visitors should be aware that if a post-observation discussion with the visited teacher does take place, it needs to be approached with great care, sensitivity, and tact.

26. Those who plan to visit L2 classrooms should read and discuss with others the literature on classroom observation etiquette. Becoming familiar with this tradition in the literature is important for visiting and visited teachers alike.