

Running head: MILLENNIAL STUDENTS IN ALTERNATIVE TEACHER EDUCATION

An Intersection of Interests: The Millennial Generation and an Alternative World Language
Teacher Education Program

Gwynne E. Morrissey
Maria J. Coolican
David F. Wolfgang

School of Education
University of Michigan

April 10, 2011
American Educational Research Association Annual Conference
New Orleans, LA

Contact:

Gwynne Morrissey or Maria Coolican
University of Michigan
SEB 1228
610 E. University
Ann Arbor, MI 48109-1259
gwynmorr@umich.edu, mariajc@umich.edu

An Intersection of Interest: The Millennial Generation and an Alternative World Language Teacher Education Program

This paper presents preliminary findings from a new school district-university partnership, the Ann Arbor Languages Partnership (A2LP), that supports undergraduates in teaching Spanish during the academic year in local 3rd and 4th grade public school classrooms. This partnership is an ongoing experiment with alternative instruction in the University of Michigan's World Languages teacher education program. The program aims to capitalize on millennial students' orientation toward collaboration, knowledge creation, and social justice in providing world language instruction to public elementary schoolchildren.

During the lifetimes of today's college students, forces of globalization and technological innovation have dramatically changed the demographics and career opportunities in the United States and will continue to do so. As society has moved toward a knowledge economy and its classrooms have become increasingly ethnically and linguistically diverse, those who are college students now—the “millennials”—have experienced somewhat different pedagogical methods than the generations before them, hearing much about *teamwork* and *making a difference*. Thus we believe that A2LP—a highly experience-based teacher education program that employs regular individual and group reflection on teaching practice—provides millennial students with a novel way to learn and participate in their community, while also offering elementary students the opportunity to learn a world language they would not experience without this program.

In addition, this program has evolved in an era of significant demand for change and innovation in the recruitment and preparation of teachers (Ball & Forzani, 2009). As Schools of Education grapple with attracting a more diverse and representative pool of applicants, *and* as colleges and universities think about the curricular implications associated with effectively teaching today's college students, programs such as this one may provide a way of thinking about new “on ramps” into teaching. Certainly the undergraduates in A2LP will not all become teachers, but the program is a unique opportunity to see what learning they gain from extensive *practice* of teaching, without most of the usual trappings of a teacher certification program.

As a means of improving the program in a data-driven way, we document how and what our “Apprentice Teachers” (ATs) learn from the structure *and* content of the program. Already the program has benefited from extensive AT feedback, leading us to make both structural and content changes. Our aim is to share the findings on how programmatic structures “speak” to millennial students in teacher education, and to illustrate how an alternative program like this can work to the benefit of *all* learners, Schools of Education, and school districts.

The organization of this paper is as follows. First, we review the literature on millennial students, with special attention to teacher education. We then describe the Languages Partnership program and the Apprentice Teachers—the term we use to describe participating undergraduates. Next we highlight the structures of the program designed specifically with millennial students' interests in mind, which provide students with customized opportunities to learn. Based on this background, we describe our study of students' learning from these various structures, focusing on data that have guided our ongoing redesign of the program. Finally, we discuss our ongoing redesign of program content and structures, and outline suggestions for other schools of education interested in developing experience-based teacher education programs for a more diverse set of students.

Characteristics of the Millennial Generation

The millennial generation, also known as Generation Y, has a dubious chronological definition, occasionally described as those people who were born between the late 1970s and 2002, sometimes between 1992 and 2002, though most descriptions use the time frame of 1982 to 2002. Many disciplines, including business, medicine, education, and psychology, are interested in the unique traits of this generation. While certainly it would be incorrect to apply generalizations to any one person based on when she was born, generational characteristics are useful heuristics for understanding societal changes and how institutions might take advantage of that understanding.

Much of the literature on millennials seems to have grown out of Neil Howe and William Strauss's 2000 book, *Millennials Rising*, which posited seven characteristics of these youths, five of which are relevant here:

- They have a sense of being special because they've been told so, implicitly or explicitly.
- Because they're special, they've been sheltered by families and schools, with the greatest amount of parental "help" with everyday problems ever.
- They are confident and optimistic, perhaps because been told they're special and they haven't had to deal with much conflict themselves.
- They are achievement-oriented, especially interested in tangible achievement.
- They are team-oriented, likely because of the way they were taught in K-12, i.e., via much group learning, and because of technology's offerings of instant, constant accessibility (see Howe & Strauss, 2000, chapter 8).

In addition, as many researchers have noted, technology has played a huge role in millennials' lives. Computers, the Internet, and social networking sites in particular have significantly influenced how these young people learn, think, and socialize (Pew Research Center, 2010).

Scholarly publications on millennials and their attitudes suggest—to a lesser extent than popular media publications—that their sense of specialness and the parental attention that contributed to it has resulted in a sense of entitlement, even narcissism, regarding how they ought to be treated in higher education and the workplace (Ng, Schweitzer, & Lyons, 2010; Twenge, 2006). As Angela McGlynn, a psychologist, writes, "They are used to being indulged as a result of changing child-rearing practices, and they are used to being consulted in decision-making by their parents" (2005). They expect their ideas to be heard and respected in every context and are interested in getting frequent feedback from supervisors, conscious as they are of achievement (Ng, Schweitzer, & Lyons). Technology has in some ways supported a "need for speed" and frequent feedback, as they are used to accessing information quickly and connecting with people easily and often (Pinder-Grover and Groscurth, 2009, p. 2).

Their team orientation manifests itself in three highly social ways: working with others to solve problems or work on projects, which has been found to enhance student learning (Slavin, 1995); a commitment to volunteer work, especially with groups for a social or civic cause (DeBard, 2004); and a desire to collaborate "closely with, and [learn] from, colleagues and managers they respect," as well as to make friends with coworkers (Ng, Schweitzer, & Lyons, 2010, p. 283).

The Internet has given people ready access to an unprecedented amount of information about the world. Millennials' technological literacy has allowed them a) to be at least peripherally aware of many social and political issues, and b) to discuss and address those issues

with web-based technologies, accustomed as they are to communal efforts to create and institutionalize online knowledge (e.g. Wikipedia). They recognize that social and political issues are complex and enjoy the challenge of working to solve them. This belief in themselves combined with the pleasure they derive from achievement may contribute to a “low tolerance for less-than-challenging work,” bordering on a low tolerance for anything that doesn’t have obvious, explicitly deep meaning (Ng, Schweitzer, & Lyons, 2010, p. 283).

In some ways, their drive to succeed may actually inhibit their abilities to demonstrate their intelligence, as they prefer “to learn in their own time and on their own terms. They seem to appreciate structured activities that permit creativity” (McGlynn, 2005). McGlynn also suggests that in educating these students, it is important to teach them how and encourage them to think about how they are learning: “Part of getting students to become critical thinkers involves getting them to practice meta-cognition, that is, they must become aware of not only what they are thinking but of how they are thinking.”

The Ann Arbor Languages Partnership

Program History & Philosophy

Under the auspices of a school-wide Teacher Education Initiative, and acknowledging our incoming students’ new skill sets and expectations, in 2008 the University of Michigan School of Education was considering experimenting with alternative instruction in the world languages teacher education program. At the same time, the Ann Arbor school district was exploring various ways in which an elementary world language program might be designed. Conversations around this confluence of interests resulted in the unconventional and innovative Ann Arbor Languages Partnership (A2LP).

This partnership allows the district to offer Spanish instruction to all elementary students, an experience that few public schoolchildren have access to, despite multilingualism being a skill that may lay foundations for social and economic mobility in an increasingly globalized marketplace. It also gives the university an opportunity to experiment with an alternative form of teacher education, and to recruit, potentially, a new population to teaching (see the *Program Details and Theoretical Foundations* section for a detailed overview).

An increasing number of public school students come from Spanish-speaking or -heritage homes; to include the home language in regular school instruction allows them to contribute cultural and linguistic knowledge to class discussions and, often, be seen as the class expert. It is an important outcome of A2LP that Spanish or heritage speakers tend to have increased social capital due to their Spanish proficiency, and therefore serve as classroom leaders in ways they oftentimes do not in other subject areas.

Experience with foreign languages is often restricted to children whose parents have the means to send them to private schools or abroad to learn another language. Furthermore, waiting to introduce world languages in the middle grades does a disservice to learners; early exposure is highly beneficial for language learning (Bialystok, 1997; Glitterman, 1999; National Academy of Sciences, 2007). Thus, the program has a social justice orientation: expose young public schoolchildren to a foreign language-cum-marketable skill early, and place public value on non-English languages, allowing students who are familiar with other languages to experience a different sense of social and academic standing in the classroom.

As the district's goal for its students is high quality Spanish instruction, A2LP has several goals for ATs, falling into two categories: professional relationships and teaching practice. Under professional relationships, we aim to develop ATs' abilities to a) work productively in dyads and multi-person teams, and b) communicate professionally and effectively—via email, phone, or in-person conversations—with Mentor Teachers and program administrators to solve problems. Under teaching practice, we expect ATs to develop their skills in the following:

- productive reflection leading to change in their practice;
- effective classroom management;
- all-Spanish (immersion) instruction; and
- lesson planning to meet learning objectives, based on knowledge of students.

We have designed the program to support students in moving toward each of these goals, and are constantly refining our practices as teacher educators to better support them.

Apprentice Teacher Demographics

A2LP is framed at the university level as a course offering three pass/fail credits per semester, for which we recruit Spanish-speaking undergraduates from a wide range of academic disciplines. We believe in the value of a diverse apprentice teacher (AT) corps. The opportunity to work with peers outside their disciplines increases the likelihood of creative approaches to teaching problems (Romm, 1998). Additionally, we believe it is critical for collegiate preparation programs to recruit a more diverse applicant pool to teaching, especially as the demographics of our K-12 student population continues to evolve. In purposely recruiting non-education majors, A2LP provides a low-stakes way for students to “try on” teaching, which already in several instances has led students to move toward a teacher education path. Because of this, we actively reach out to men and students of color whose entry into the profession could increase the number of role models for students of color and for boys; improve all students' understanding of racial, cultural, ethnic, and linguistic diversity; and even improve minority students' academic achievement (National Collaborative on Diversity in the Teaching Force, 2004).

About a third of 55 ATs in this, our second year, are teacher education majors. There is some overlap between this group and the group of ATs who taught with A2LP in its inaugural year and returned to teach this year (also about a third of the whole group). Eleven men, three African-American students, and two native Spanish speakers are teaching with us this year. Thirty-five ATs are Spanish majors or minors, while eight are majoring in STEM fields.

Program Details & Theoretical Foundations

On the university side, A2LP is an amalgam of schools of thought on best practice in teacher education (Lampert and Ball, 1999; Schön, 1982), foreign language teacher education (Kurzweil, 2007), higher education (Chickering and Gamson, 1987; Sword and Leggott, 2007), and education in general (Dewey, 1933; Kolb, 1984). We believe that these practices are valuable to learners of any age, not just our millennial participants, though this generation's reported commitment to social justice and community involvement certainly lends a different tone to our work with them. In particular we recognize that, though A2LP participants teach, they are not—in most cases—education majors, and that the program must offer them just the right kind and amount of knowledge and the opportunity to practice skills that will support them

during their yearlong apprenticeship.

Much of this work is framed by the experiential learning cycle, which is based on the notion that one learns best by “doing,” supported by and scaffolded with structured reflection, the application of that reflection combined with feedback, and the opportunity to continue to apply one’s emerging skills in the field (Kolb, 1984). Throughout the course ATs build a learning portfolio out of action plans and lesson plans, weekly responses to reflection prompts, and learning statements, all of which are invaluable ways of documenting the experiential learning process. In this process, the “doing” of teaching is also the learning of teaching, though the experience they gain is low-stakes because the program does not lead to certification.

We believe that in a new program like A2LP, it is essential to conduct ongoing formative evaluation so we can continually adjust the program to benefit learners and instructors. This study spans a sizable programmatic change from a model of prescribed weekly input to one of just-in-time coaching. This outline of the program’s structures includes descriptions of both models. We hope that the change itself and the sources of feedback that drove it can serve as a helpful example to other teacher education programs of the value of institutional reflection and timely programmatic redesign.

Training. The program begins with mandatory, intensive training that includes readings, lecture, method demonstrations, large-group discussion, lesson “scripting” based on pre-designed lesson plans, and practice teaching followed by peer and instructor feedback. Each day during training the ATs write a brief reflection—an “exit ticket”—on something they learned, why it is important, and how they will use what they have learned in future lessons or interactions (*what, so what, now what*, per Eyer & Giles, 1999).

Seminar. During the school year, ATs attend a weekly seminar, led by university staff and graduate students, and teach two or three 3rd or 4th grade classes twice a week. Based on literature on teacher and millennial education, we have designed the seminar to essentially be an extension of training. There, instructors provide input on a range of teaching-related topics and ATs reflect on, write about, and discuss their teaching; observe demonstration lessons and practice their own; and receive feedback from their peers and seminar instructors (Burton, 2009; Chickering & Gamson, 1987; Sword & Leggott, 2007). Most important is the group approach to celebrating individual ATs’ successes and brainstorming resolutions to teaching’s challenges. Best practice in higher education suggests that peer discussion and group reflection leads to enhanced student understanding, in part because the work of discussing options creates communal knowledge (Murphey & Sato, 2005; Smith et al., 2009; Sword and Leggott, 2007).

Planning and teaching. Weekly lesson “scripts” are based on pre-designed lesson plans and the associated activities and vocabulary. Students are responsible for “staging” each lesson with details about what they will say/do, what they expect their students to say/do, and what problems they might encounter and how to solve them. Those who teach with a partner co-create these scripts, while those who teach solo may write them alone or discuss them with another person or group. All ATs are responsible for creating their own materials. Materials include posters or other visuals that support activities; handouts and worksheets; and documents or manipulatives that students may need in order to participate in a particular lesson. Spanish lessons are taught in 3rd and 4th grade classrooms, with support and feedback from the classroom teacher, to whom we refer as a Mentor Teacher (MT). ATs are regularly observed by university

staff and graduate students, though because of the intricacies of individual schedules, observers are not always ATs' seminar instructors.

Reflective writing. Through mid-February of the second year, ATs wrote weekly reflections. The first part of these reflections was meant to address their previous week of teaching and its successes and challenges. The second part was a response to a topical prompt, usually based on the topics covered in seminar the previous week. These reflections were submitted to their observer, who responded to them with questions, comments, and suggestions. This set-up was meant to be an opportunity for ATs to think through some of their teaching dilemmas and successes, and for instructors to provide individual coaching and suggest instructional possibilities, as suggested by York-Barr, Sommers, Ghere, and Montie (2001). Ideally we meant for ATs' reflections to serve as foundations for action plans, documents that detail very specifically how they will work to strengthen a weakness in their practice or preparation, or support their students better. In mid-February, this reflective process changed in order to better facilitate an ongoing dialogue with an instructor that can serve as an individualized source of learning; this change will later be discussed in greater detail.

A2LP for millennials. The following table presents Pinder-Grover and Groscurth's four principles most effective for teaching millennials, according to findings on millennials' interests and proclivities, as well as suggestions from contemporary higher education scholars, and shows how A2LP's model exemplifies each of these (2009, p. 3).

Principles for teaching millennial students	A2LP exemplifies these with...
Facilitate cooperation among students	co-teaching, co-planning, dialogue with peers, structured peer feedback sessions
Prepare students for diversity and cross-cultural interaction	training for, experience with, and reflection on working with diverse elementary students – ESL, special learning needs, heritage speakers, etc. Working with peers outside their major (engenders interdisciplinary perspectives and solutions)
Cultivate knowledge creation	cooperation with classroom teachers, dialogue with peers and instructors, reflections on experience, iterative lesson planning
Promote active engagement inside and outside the classroom	explicit, participatory models of teaching and learning situations; discussions of past and anticipated experiences with individual students, whole classes, and content; engagement in A2LP's wider goal of bringing world language skills to students at a more developmentally appropriate time in their schooling

Studying Millennials' Learning in A2LP

Research Questions

This program's newness offers us the opportunity to be uniquely attentive to possibilities for incrementally refining and perfecting its delivery. We are particularly interested in ensuring that the model is efficient and reflects the program's two main purposes: elementary level

Spanish instruction and supporting primarily non-teacher education majors in that instruction. Therefore, the research questions guiding this paper are:

1. From what programmatic structures—role plays and modeling, seminar discussions, written reflections, formal and informal peer interactions, and classroom teaching experiences—do apprentice teachers learn best about the practice of teaching?
2. In their individual reflections, which elements of the teaching and learning process are ATs most engaged with emotionally and intellectually?

Answering these questions with input from a diverse subset of apprentice teachers has already and continues to drive ongoing redesign efforts so the program best meets millennial ATs' changing needs throughout the academic year, and continues to deliver high quality instruction to the district's 3rd and 4th grade students.

Data Sources

For the purposes of this paper, we use evidence of apprentice teachers' learning and developing competences in the program's second year. As mentioned previously, about two-thirds of participants are non-teacher education majors, and about a third are in their second year of teaching with A2LP. In addition, over the course of the year (with some changes from Fall to Winter semester), a little over half of ATs have taught with a partner, while the rest have taught solo. We used stratified purposeful sampling to represent the experiences of these three diverse categories of participants (see Patton, 2002, p. 244).

We began the process of studying ATs' development during their Training experience, asking last May for volunteers to participate in a yearlong series of focus group interviews. Promising food and just one hour out of their day about once every six weeks, we recruited ten ATs who, conveniently, represented many different majors, ages, and comfort with Spanish. The focus group consisted of two male and eight female ATs. One of these young women is one of two native Spanish speakers in this year's cohort. Focus group participants come from a variety of academic majors, including Spanish, psychology, history, sociology, and urban and community studies. These ATs are predominantly first- and second-year undergraduates; their ages range from 17 to 21.

The first focus group was held immediately after their three-week Training experience ended. All meetings of this group have focused on ATs' personal perspectives on what we term "ah-ha!" moments, difficulties and ease with the reflective process and the program's structures and expectations, and individual change and development. See Appendix A for a list of prompts used over the past nine months. We see the part standardized, part open-ended interview process from a constructivist perspective: inherently reflective, mirroring and adding to the interview's list of topics in ways we believe will be instructive (Silverman, 2001).

In addition we have collected much evidence of students' learning from their portfolios, which include reflective, planning, and observational documents produced throughout the year. Course instructors formally collect and respond to these portfolios after Training, at the end of the first semester, and at the end of the second semester. For a preliminary study like this, we reviewed reflective writing for a small subset of ATs: three new and two veterans who together represent the diversity of AT contexts. One of the new ATs is a man who has taught alone since September, one is a woman who has taught solo and with a partner since September, and one is a

woman who taught with a partner in Fall semester and is teaching solo in Winter. One of the veteran ATs is a woman in the secondary teacher education program who has taught solo for two years, the other is a male music major who has taught both solo and with a partner for two years.

We analyze evidence of student learning—or lack thereof—from instructors' perspectives, collected in note form at weekly group meetings. Among others, the major aims of these meetings are to brief the A2LP instructional team on difficulties and successes with particular ATs or groups of ATs (in seminar); to engage in collective problem-solving around some of these ATs' experiences; to discuss programmatic structures; and to plan future seminars. Thus the data we collect from instructors are anecdotal, based on their ongoing observations of and conversations with ATs.

Methods

We use issue-focused analysis with each of our three data types. The issue-focused analytical method was detailed by Robert Weiss (1994) and is, as its name suggests, focused on what can be learned about specific issues “from any and all respondents” (p. 154). This is especially suited to focus group and instructional team meeting data, as the purpose of those groups is to gain information about how ATs are learning, from what structures, and how those structures might be improved. Data from ATs' written reflections are less explicitly metacognitive, but we approach those data from the same perspective as the others: having identified elements of A2LP that are opportunities for ATs to learn, what do ATs actually learn from in the most powerful way, most frequently, most enthusiastically?

With data from focus groups, we began by identifying the elements of A2LP that are opportunities for ATs to learn. These included:

- Training activities (not discussion-based, e.g., lecture)
- Written reflections
- Group/peer discussions
- One-on-one discussions with the seminar instructor or observer
- Seminar activities (not discussion-based, e.g., readings)
- Classroom/practice teaching
- Demonstration lessons (conducted in Training or seminar by instructors or peers)

We then read transcriptions of five focus group interviews (one for each of two Training groups, September, December, and February) conducted by the first and third authors. As we read, we marked all statements and interchanges between participants about learning (or failing to learn) from any of these. We made short notes about ATs' perspectives in each of these statements as we coded these categories. We then excerpted these statements/interchanges and placed them in a data table according to category. So we could follow change over time—if any—we organized these by interview, as well.

The analysis of reflective writing was similar, though this stage of analysis was focused more on giving nuance to the codes from focus groups, identifying those features of the teaching and learning process that ATs engage with emotionally and intellectually in the reflective process. The coding system for meeting notes combined the codes for focus groups and reflective writing.

For each type of data, we reviewed each excerpt as well as the short analytical memos from the original coding to summarize each element's importance to ATs, why it was important, and how/whether that perception or experience changed from Training in May through February.

These summaries essentially function as “mini theories” about the usefulness of programmatic structures or the salience of certain teaching or learning experiences, some of which we had already tried to verify in our focus group interviews through follow-up questions. Because we had also included ATs’ and instructors’ comments about *not* learning from certain A2LP elements, and had included those excerpts in the data table, we incorporated these into mini theories of each element’s salience.

Finally, this report represents the “inclusive integration” of all of these excerpts into an organized, “coherent sequence” that tells the story of how A2LP works for Apprentice Teachers and the experiences that are most compelling as they develop their teaching skills (Weiss, 1994, p. 154).

Findings

Overview

We find that Apprentice Teachers began their time in A2LP—in Training—very concerned with the process of lesson scripting and “collecting” teaching techniques (see Appendix B for a listing of the frequency with which ATs discussed each programmatic structure). They pointed to teaching experience and training activities that sensitize them to the role of being a language learner as those structures from which they learn best. They acknowledged that reflective writing *can* be a useful tool for learning, but that the documentation of that process can take a lot away from it. During Training instructors noted that ATs were reluctant at times to take on the role of a language learner, feeling “condescended to,” a reaction the instructors had never encountered in previous training situations with non-college-age adults. We wonder a bit at this, and are considering the possibilities that it emerges from a) a poorly constructed teaching activity on our part, or b) from some millennial characteristics, specifically their constant desire to be engaged in what they define as meaningful work and interaction.

In the academic year, ATs have certainly benefited from the practice of reflection, using their reflective writing and dialogues to improve their ability to differentiate instruction. Over time, though, the requirement that they reflect on teaching in response to weekly prompts increasingly frustrated them, as they asserted that the prompts were not always relevant to their current teaching situations and needs. However, the ATs have largely developed strong skills in discussing and evaluating teaching difficulties with peers. They are eager to experiment with and share new ideas, and even identify whole-group discussions with peers as the greatest source of learning behind actual teaching experience. They are still working on classroom management techniques, and some have not yet developed a confident relationship with the Mentor Teachers in whose classrooms they teach, but they are aware of and interested in improving these elements of their practice.

Programmatic Structures as Sources of Learning

From May to February, Apprentice Teachers gained a lot of information very quickly about young learners and about themselves. Group reflection on that information has benefited them differently from individual reflection, though both are valuable sources of learning. Our focus group participants clearly improved their ability to reflect constructively on their own and their elementary students’ learning. Discussions across several months clearly showed

increasing confidence in conceptualizing and acting to address their and their students' difficulties.

The most salient source of this confidence in Training was demonstration lessons, but classroom teaching experience soon took over, with its immediate feedback from elementary students, followed by whole-group discussions.

At first, ATs had little confidence in their ability even to plan a lesson without having seen it taught previously. In September, when seminar no longer included demonstrations of entire lessons, they were aware of and nervous about the reduced scaffolding:

“[T]he only reason I could even get through a lesson during training, teaching it, was because I had seen it before. So seeing these lesson plans come at me, and I've never seen them, it's really hard.”

However, the large amount of information they took in while teaching elementary students and their ability to use tacit knowledge to address unexpected events soon gave them greater confidence. The importance of actual teaching experience in learning how to teach has not changed since ATs' first encounters with teaching in Training. In May, one AT offered, “...I think you gain the most the day you teach,” and a peer cemented that assertion nine months later, saying:

“I think that just the whole process in general of learning how to teach is just reversed. Instead of sitting in a classroom and reading about it, we just go out there and do it, and then learn from it, and reflect on it and learn from it even more. So I think it's just kind of the opposite of a normal class—sure it has the basics: the homework and occasional reading, but instead of focusing on the readings, it's more focused on the hands-on stuff. I learn more from that than reading a book and forgetting...”

They appear to see the “hands-on” experience of teaching as more salient than typical course expectations of readings, lecture, and writing. Furthermore, they seem to see the act of reflection as an essential element of that learning process. Seminar, which serves as the site of group-based reflection and problem-solving, provides emotional and intellectual support without which the task of teaching Spanish might be more superficial:

Emotional support:

“It creates the community as an essential part in A2LP, and without seminar I don't think we'd have that community.”

Intellectual support:

“... I think seminar is a good way to guide our thoughts. Honestly, if I didn't have seminar, I'd go in there and teach and get through, but I wouldn't have thought nearly as deeply because of seminar. All the different things they point out and kind of guide your reflections when you teach, how students learn, all that, I think it's a great help, and I'm really glad I'm in seminar.”

These students describe a highly mutual respect for one another's ideas and experiences, from the very beginning finding great value in peer-to-peer discussions. For some there is particular

value in discussing lessons with peers who are teaching the same grade, while others see the whole group, regardless of grade level, as a viable source of ideas:

“This is something that all of us are saying, like that we just really like to be able to bring a question to the group and ask what would you do in this situation? How would you handle that? And then we won’t see it, and we can get some ideas of like ah okay. I see how that would work. Then you think that you know, you can kind of work on that and come up with an effective script.”

Apprentice Teachers in our focus groups repeatedly observed that reflective writing had its pros and cons. They were certainly not averse to reflection itself, stating early on that good reflections *can* turn into action plans. But in Training, after so much reflection with the larger group, ATs found that daily reflective writing felt quite forced, and in the academic year, they consistently found the prompts irrelevant to their unique teaching situations each week. Occasionally this turned the requirement into an academic one of writing a set number of pages, or creating an artifact, rather than engaging in intellectual self-improvement. “Sometimes,” though, one AT remarked:

“when I do have a dull week and it has to be reflected on something, it kind of forces me to think. That could be good or bad because it may make me try to make something up, not that, but look for something...yeah. It can also be good because it forces me to do that and actually think about it and how to handle it.”

ATs themselves suggested some of the changes the instructional team made in February to the reflection element of the program. Their reflections now consist of postings on a class webpage where they bring up situations in their classrooms or topics that they feel would shed valuable light on their practice or their students, and to which their peers respond. Recognizing ATs’ desire for more peer conversations and their respect for one another’s and the seminar instructor’s ideas, these web postings provide the content of the following week’s seminar, as well as a site for just-in-time consulting with peers and the “expert” instructor.

Individual Reflection on the Teaching and Learning Process

In their reflective writing, these millennial students prove to be most concerned with teaching techniques, learning about their students, and classroom management. This is appropriate, given the main aim of the program from their perspective: to teach elementary Spanish. Apprentice Teachers also frequently referred to interactions with or a desire for more interactions with their Mentor Teachers. Mentor Teachers (MTs) are a great source of support for role plays, classroom management, and information about students, though several ATs reported difficult relationships with them. Though seminar instructors encouraged ATs to build communication with MTs into their weekly routine, even in late October, ATs noted that they hadn’t yet figured out MTs’ classroom management techniques or asked MTs about students who seemed challenging to teach. In their reflections, ATs also discuss other features of their teaching worlds, including lesson scripting, teaching with a partner, teaching philosophies, the importance of practicing before teaching, and expecting the unexpected.

We find interesting contrasts in the content of reflections between the returning AT who is also a Teacher Education student, and new ATs. This returning ATs' reflections are less intimate, more focused on how creative, enjoyable, and inspiring teaching is, and how "stressed out" she is. Interestingly, *both* returning ATs use reflections more as a venue for celebrating the program and themselves, rather than "thinking out loud" to resolve challenges in their teaching. They may identify difficulties, but rarely do they attempt to resolve them. By way of illustration, here are typical responses from each of these returning ATs to the prompt, "What's going on in your teaching world this week? Please share at least one thing that you're proud of or excited about and one thing that's concerning or puzzling you from this week's teaching. How will you use what happened in your classroom this week to improve your teaching for next week?":

Teacher education student (female):

"The few weeks leading up to Thanksgiving and then finals are always stressful and hectic. Due dates, final assignments, and the stress of winter coming never are a fun combo. Throughout all of the stress and un-enjoyable studying, however, I usually find myself looking forward to creating my materials late at night for A2LP. This semester especially, in making many of the PowerPoint's that I have created, as well as the posters and other materials, I have allowed myself the artistic and creative outlet that the rest of my classes do not allow. Specifically last night, coming home late from the library, I immediately was put at ease while watching Los Pimpollos sing their rendition of "Los cuatro estaciones" and was reminded of how fun and easygoing, yet informational and interactive a lesson at the elementary level can be.

Music student (male):

"My teaching world this week brought forth both many delights as well as several challenges. From the moment I enter the classrooms to the very last second of each lesson, I am completely filled with joy, knowing that I am part of such an ambitious, grand undertaking like the Ann Arbor Languages Partnership. The fact that I get to teach Spanish in as many classrooms as I do and impact the lives of some of the world's youngest citizens always amazes and inspires me. Their excitement and willingness to participate in the lessons and get to know me always pushes me to be and to do the best job I can as I work to increase their knowledge and overall confidence with the Spanish language and culture. ...

All of this, undoubtedly, brings me joy, but there are times when I am in search of ways to make things more interesting to the few students who are always 'above' a certain knowledge. What do I mean by this? Well, a great challenge that I am facing this semester of teaching is with the students who have taken the 3rd grade Spanish classes already. A lot of the material we have gone over so far seems to bore them and they sometimes grow restless during lesson periods and become distractions to other students, including those who may not have a good grasp on the language. ... I feel that, at times, it can be a major challenge to my authority and my ability to teach both them and the students who really need the review. This is something I plan to think more about as the lesson continue. ... It is a very interesting situation, but I make things work the best I can."

Perhaps it is an indicator of greater confidence in teaching and comfort with the learning process, though their generally low level of intellectual engagement with the reflective prompts gives us pause. There have been problematic situations in each of these students' teaching experience this year, practically none of which receive any attention in their reflections, suggesting that an inflated sense of confidence and skill may be blinding them somewhat to real issues of teaching and learning.

Interestingly, the latter student, a man, seems to share the same approach to reflecting on the difficulties of teaching as the other male in our sample, a new AT majoring in Spanish. This student began A2LP recognizing that he didn't know everything, but not being very specific about what he could change about his teaching besides practicing more. Here, he writes that "APs" (action plans) would help solve this particular problem, but does not remark on how:

"However, I obviously still made some mistakes. For one, I led a student into a trap, forcing her to use vocabulary we have not yet "learned." There were also some issues with making sure directions were always clear. I think that with some more practice and more APs, these problems could be easily fixed. In the future, I will also make sure to be more prepared for lessons by practicing more beforehand."

As the academic year went on, he expressed confidence in his teaching techniques, even describing some of his lessons as "stale" for his students, but he also repeatedly described situations of being unable to address unexpected misunderstandings in his classes. Over time, he became somewhat more specific in his writing about ways he *could* have solved those problems, and expressed interest in brainstorming more with his peers, but he seems not to have viewed his reflective *writing* as a great source of learning (he may very well view the act of reflection as valuable, but find the process of writing it down as inhibiting or not useful):

"One puzzle I have been having is demonstrating different activities in a clear, concise manner in Spanish. Even while trying to demo something with my hands and few words, students shout out, "I don't know what you are saying!" or "We don't know Spanish!" I would like to brainstorm new ideas for this in seminar. I will continue to try to refine teacher language to improve teaching in the future."

This is typical, even developmentally appropriate for adolescents in college, that they miss opportunities to improve. A2LP's pedagogy, based on the experiential learning cycle, is to repeatedly loop back to topics and types of communication breakdowns ATs may encounter, so that on seeing something for the third time, perhaps a student finally "gets it".

From May through February, the two new, female ATs used the reflections somewhat differently, posing problems in their teaching, considering why those problems occurred, and identifying ways to solve them. Each of these students is explicit about using reflections as a source for action planning and learning to teach better. Both women teach at least one of their classes solo and at least one with a partner, and they each routinely discuss the difficulties of both situations, some political, others logistical:

Political issues in teaching with a partner:

"On our second day of teaching, I realized that [my partner] and I had not been very authoritative with the students. We both spoke with soft tones and seemed warm,

polite, and perhaps too nice. The classroom teacher suggested that we address them differently, with more authority and firmness in our voices while using microphones. I took this suggestion to heart because by that point, I was willing to try anything. It did seem to be more effective and get the students' attention, but my teaching partner was still speaking softly and “nicely.” This created a little disconnect in our classroom because suddenly, I was the mean teacher and [my partner] was the nice teacher; we were playing “good cop, bad cop.” [We] discussed this a little afterward and we're going to try to find more of a balance so that there is consistency in the tone of the classroom and we can work more effectively as a team.

Logistical issues in teaching without a partner:

“For modeling, I used ... my partner in Ms. D’s room, and he had a terrific ball that we passed to signify who spoke; when one received the ball, it was time to respond appropriately. With [my partner], modeling was easy. ... Then [in Mrs. S’s class] I called a volunteer who seemed hardy enough to grasp the situation, and that helped the rest of the class enormously. This seemed an effective-enough method for talking-out a conversation in Mrs. S’s class, so I guess I will keep it up.

We chose these young women originally as representatives of different types of teaching situations, but each of them turns out to be an extraordinary storyteller. Their reflections are usually detailed without being nit-picky; use engaging language to describe actions, emotions, and plans; and are clearly aimed at proving that they have learned something in the process of teaching and writing about it. Instructors have noted that while neither of these ATs is the most intuitive or the most effective teacher in our cohort, they have each improved dramatically over the year. We find it unlikely that this improvement is purely developmental, based on the effort they put into describing their learning process. For these young women in particular, the value of the experiential learning cycle seems quite clear. In their reflections they return often to similar topics, building each time on their understanding of their own learning as well as on their increasing ability to meet their students’ needs.

Instructors’ Responses to ATs’ Work and Feedback

Throughout the academic year, instructional team meetings are sites of programmatic reflection and learning, primarily concerned with identifying logistical and intellectual difficulties and successes for ATs, and planning how to address those issues both in seminar and in one-on-one interactions. Most of these discussions result in action plans for working with individual ATs or addressing a particular topic in seminar that’s relevant to all ATs. We are consistently interested in moving ATs toward the program’s goals, repeated here:

Professional Relationships: Develop ATs’ abilities to...

- work productively in dyads and multi-person teams and
- communicate professionally and effectively with Mentor Teachers and program administrators to solve problems (including email, phone, and in-person conversations).

Teaching Practice: Develop ATs’ skills in...

- productive reflection leading to change in their practice;
- effective classroom management;
- all-Spanish (immersion) instruction; and
- lesson planning to meet learning objectives, based on knowledge of students.

Over the course of the year, instructors have met with individual ATs—sometimes repeatedly—to address various issues that inhibit their attainment of these goals: organizational problems that impede their teaching effectiveness, the art of professional and timely email-writing, conduct during seminar discussions. They have also given major lifestyle suggestions to those who fail to communicate with partner ATs or MTs, fail to show up to teach, or inappropriately change lesson activities so lessons no longer meet learning objectives. Returning ATs are in need of just as much guidance from instructors as new ATs, interestingly; they are not uniformly more professional or better at planning and enacting lessons. This latter point is intriguing when we consider the expected “transfer effects” a teacher education program might have on students’ developing professionalism. We had anticipated that the ATs who are simultaneously enrolled in our traditional teacher education program would exhibit more sophisticated teaching and professional behaviors than the larger group of ATs who come from other academic majors. We were surprised that this was not the case, and this is an area to which we will devote more attention beginning with the third class of ATs who have already begun training for the 2011-2012 academic year.

In some instances, a whole-group approach to problem-solving is appropriate. When instructors found ATs planning different activities from those specified in lesson plans, which didn’t similarly meet lesson objectives, the team’s discussion centered on how to bring ATs’ attention back to the point of objectives through their own seminar structure. In addition, they determined that, since the school district is counting on the program to meet objectives for learning that were agreed upon at the beginning of the year, ATs should be required to check with seminar instructors before changing lesson activities. However, ATs’ desire to modify activities was a strong developmental indicator of increasing confidence in their own skills, and instructors wanted to honor that confidence with some amount of freedom.

In the middle of the Fall semester, instructors noted several incidences of ATs plainly not using any Spanish in lessons or translating everything they said in Spanish into English, without relying on gestures, role plays, or props to support comprehension. Several discussions about this revealed that observers and seminar instructors were having individual conversations about increasing the amount of Spanish students heard in every lesson, and one instructor held a whole-seminar discussion about the benefits and difficulties of A2LP’s expectation of Spanish only. Over the course of a few weeks, observers noted that ATs had increased their Spanish use.

In nearly all instances, a concern for ATs’ learning is the driving force behind programmatic changes, most of which are enacted because of these team meetings. These changes have essentially marked a change in our perception of A2LP’s goals for Apprentice Teachers. While we began the partnership thinking of it as a program wherein students would develop highly reflective practice, what we are learning is that our millennials view this as a community service and, as such, don’t want to feel like students who must meet specific and standard requirements. While they want to teach well, they don’t want the “busy work” of writing reflections on topics that aren’t meaningful to them. They do want to engage deeply and intellectually with the work of teaching, but the act of doing so on paper is inhibiting to some,

anathema to others, and so requires a different, more in-the-moment format for reflecting alone and with others.

In February (mid-semester), the latter feedback, which had been building since Training, resulted in several changes to the program's expectations for reflection. As previously discussed, reflections are now based on ATs' unique teaching situations, challenges, and successes, and their regular postings and responses to one another's postings constitute the content of weekly seminars. Seminars now also have large-group and small-group components, so students can build stronger relationships with certain small-group members and dig in more deeply to recurring or large problems, while large-group discussions give them access to a wider range of experiences and ideas for improvement. Furthermore, we have reiterated to ATs our commitment to their success in whatever format is easiest for them, so if conversations with their seminar instructor are the most effective for mid-week problems, seminar instructors have made themselves as available as possible by phone, text, email, and in-person meetings.

At that same time, instructors determined that ATs had forgotten a part of our core mission: to develop their professionalism. Over several weeks, ATs had described experiences with Mentor Teachers or exhibited behaviors in seminar that suggested they were getting perhaps too comfortable, not presenting themselves or the University in the most positive light at their elementary schools. It was clear that we needed to re-communicate our expectations of professionalism, defined generally as "being present," making an effort to communicate questions or problems and to do so politely and in a timely way, affecting a positive attitude, and attempting to solve problems on their own. Logistically, in seminar, this resulted in a new expectation that cell phones would be off and computer screens down during discussions. It also led to more frequent and sincere conversations with ATs about the importance of acting the part of a "real teacher" and offering more explicit templates for emails and conversations with MTs.

Implications for A2LP & Teacher Education

We believe that A2LP, as a model of experiential learning and design-based research, is very well suited to the learning expectations and needs of our millennial students. We have built a program that respects their opinions on how they learn best and want to participate, and responds to their feedback on changes, while upholding a core set of educational and professional values that define their work with us. Simultaneously, we guide them in learning how to "act like a grown-up" in relation to Mentor Teachers, people whom they previously perceived as authority figures. We provide them with a source of their own authority—the Spanish language—and help them to create a professional relationship with Mentor Teachers, teaching partners, and program staff.

The Partnership capitalizes on their drive to achieve, asking them repeatedly—on paper and in group discussions—to prove that their elementary students are learning and to show that *they* are learning from their experiences. At the same time, since they are teaching a subject that Ann Arbor's elementary students would not otherwise learn, they are rewarded by enthusiastic students whose only source of Spanish knowledge is *them*.

The use of real-time, large-group discussion spaces on the web to host ATs' reflective posts, even in just the four weeks since the change took place, has proven to be a better source of learning for ATs and seminar instructors than prompt-based reflections. This technology is a convenient way of tapping into our ATs' desire for quick turnaround time on their "assignments" and for identifying patterns in AT experiences so seminars can be better developed in the future.

ATs are very energized by seminar being so focused now on group discussion of topics that are most important for their teaching in the near future.

As an experience-based course that requires participants to self-assess and assess their own students throughout the academic year, A2LP benefits from a highly involved student body that knows what it doesn't know. This plus the importance of delivering strong Spanish instruction puts us, by mid-Fall semester, in a unique position of generally being able to rely on our students to work with us in driving and shaping the curriculum of the course. Our frequent and triangulated data collection allows the whole instructional team to be aware of students' developing strengths and persistent weaknesses. Perhaps not all university courses for undergraduates could be arranged in such a fashion, but we are confident that teacher education courses—indeed, entire programs—could benefit from the willingness of millennial students to offer feedback about what they know and don't know, and respond iteratively, throughout a course or program, in a way that respects their feedback *and* helps them to distinguish what they *think* they know and can do from what they *actually* know and can do.

We are delivering content differently from every other Teacher Education program at our university and, we believe, from most other schools and colleges on campus. A large course housed in the relatively small World Languages part of the Teacher Education program, A2LP is an opportunity to test new methods and time frames for educating teachers, bring a new set of diverse students to the School of Education, and possibly encourage them to stay in teaching, and to set a new standard of cooperation with area schools.

It is our hope that this model of partnership between a university and a local school district is one that is replicable. Especially in an era of scarce fiscal resources, programs that leverage a university's capacity and a district's desire for increased opportunities for student learning hold the promise of innovation and entrepreneurial ways of thinking about teaching and learning. We hope, too, that our emerging understanding of the intersection between millennials' interests and our academic goals as teacher educators have generated data that can inform how other institutions can create and/or redesign programs that appeal to students and begin to reframe teachers' expectations for learning and professional development. In particular, we hope that such programs would contribute to the profession's increasing openness to learning from one another and from perpetually thoughtful reflection on one's own practice.

Acknowledgments

We wish to thank the University of Michigan's Center for Research on Learning and Teaching (CRLT) for financial and conceptual support in conducting and publicizing this work. Thank you, A2LP instructional team—Jean Mrachko, Viki Tijunelis, and Kerri Burchill, for your feedback on our developing themes and for your flexible thinking and action in response to ATs' feedback.

References

- Ball, D. L., & Forzani, F. M. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education, 60*(5), 497-511.
- Bialystok, E. (1997). The structure of age: in search of barriers to second language acquisition. *Second Language Research, 13*, 116-137.
- Burton, J. (2009). Reflective practice. In A. Burns & J. C. Richards (Eds.), *The Cambridge guide to second language teacher education* (pp. 298-307). Cambridge, England: Cambridge University Press.
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *American Association for Higher Education Bulletin, 39*(7), 3-7. Retrieved January 3, 2010, from <http://www.aahea.org/bulletins/articles/sevenprinciples1987.htm>
- DeBard, R. (2004). Millennials coming to college. In M. D. Coomes & R. DeBard (Eds.), *Serving the millennial generation* (pp. 33-45). New Directions for Student Services, No. 106. San Francisco: Jossey-Bass. doi: 10.1002/ss.123
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston: D.C. Heath and Company.
- Eyler, J., & Giles, Jr., D. E. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass.
- Glitterman, M. R. (1999). The critical period: Some thoughts on Grimshaw et al. (1998). *Brain and Language, 66*(3), 377-381.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage Books.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Kurzweil, J. (2007). Experiential learning and reflective practice in teacher education. Unpublished Master of Arts thesis, School for International Training, Brattleboro, VT.
- Lampert, M., & Ball, D. L. (1999). Aligning teacher education with contemporary K-12 reform visions. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 33-53). San Francisco: Jossey-Bass.
- McGlynn, A. P. (2005). Teaching millennials; Greater need for student-centered learning. *The Hispanic Outlook in Higher Education, 16*(1), 19.
- National Academy of Sciences Committee to Review the Title VI and Fulbright-Hays International Education Programs. (2007). *Executive summary, International education and foreign languages: Keys to securing America's future*. Washington, DC: National Academies Press.
- National Collaborative on Diversity in the Teaching Force. (October, 2004). *Assessment of diversity in America's teaching force: A call to action*. Retrieved May 12, 2010, from www.ate1.org/pubs/uploads/diversityreport.pdf
- Ng, E. S. W., Schweitzer, L., & Lyons, S. T. (2010). New generation, great expectations: A field study of the millennial generation. *Journal of Business Psychology, 25*, 281-292. doi: 10.1007/s10869-010-9159-4
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

- Pew Research Center. (2010, February). *Millennials: Confident. Connected. Open to change*. Retrieved from <http://pewsocialtrends.org/assets/pdf/millennials-confident-connected-open-to-change.pdf>
- Pinder-Grover, T., & C. R. Groscurth. (2009). Principles for teaching the millennial generation: Innovative practices of U-M faculty. CRLT Occasional Paper No. 26. Ann Arbor, MI: University of Michigan Center for Research on Learning and Teaching. Retrieved November 6, 2009, from http://www.crlt.umich.edu/publinks/CRLT_no26.pdf
- Romm, N. R. A. (1998). Interdisciplinary practice as reflexivity. *Systemic practice and action research*, 11(1), 63-77.
- Schön, D. (1982). *The reflective practitioner*. New York: Basic Books.
- Silverman, D. (2001). *Interpreting qualitative data: Methods for analyzing talk, text, and interaction*. London: SAGE Publications Ltd.
- Slavin, R. E. (1995). *Cooperative learning: Theory, research, and practice* (2nd ed.). Boston: Allyn & Bacon.
- Smith, M. K., Wood, W. B., Adams, W. K., Wieman, C., Knight, J. K., Guild, N., & Su, T. T. (2009). Why peer discussion improves student performance on in-class concept questions. *Science*, 323(5910), 122-124. Retrieved April 9, 2009, from <http://www.sciencemag.org/cgi/reprint/323/5910/122.pdf>
- Sword, H., & Leggott, M. (2007). Backwards into the future: Seven principles for educating the ne(x)t generation. *Innovate*, 3(5). Retrieved January 3, 2010, from <http://www.innovateonline.info/index.php?view=article&id=389>
- Twenge, J. M. (2006). *Generation me: Why today's young Americans are more confident, assertive, entitled—and more miserable than ever before*. New York: Free Press.
- Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies*. New York: The Free Press.
- York-Barr, J., Sommers, W. A., Ghere, G. S., & Montie, J. (2001). *Reflective practice to improve schools: An action guide for educators*. Thousand Oaks, CA: Corwin Press, Inc.

Appendix A

Focus Group Prompts

- How would you define the experiential learning cycle in the context of A2LP? How, if at all, have your experiences with it so far influenced your understanding of how you learn?
- What has been difficult and what has come easily related to the reflective practices your instructors have expected of you during Training?
- How do you see yourselves using reflection and the ELC in your teaching practice this coming year?
- What's an "ah-ha!" moment that has resulted from interactions with peers or instructors? How did/might this affect future teaching, writing, talking with peers or instructors, etc.?
- What is helpful (or not) about the weekly reflection prompts?
- What are you learning from working with your mentor teachers?
- How have you developed as a teacher since we last spoke?
- How have you developed as a thinker?
- In what ways is A2LP the same as and different from other academic coursework? What about these similarities and differences is good or bad?
- Based on a quick description of a millennial student's learning style, interests, and skills, do these characteristics describe you as learners? Does A2LP reflect those characteristics?
- From which of the main elements of A2LP (seminar discussions, one-on-one peer interactions, observer interactions, classroom teaching) do you find you learn best or most?

Appendix B

Themes from Focus Groups and Reflections: Frequencies of Mention

The following lists indicate the frequency with which ATs mentioned or discussed programmatic structures as sources of learning (in focus groups) and elements of the teaching and learning process (in reflective writing).

Programmatic structures

Training (from 2 focus groups with 10 ATs participating)

- 1 – Lecture/input sessions
- 2 – Experience as a learner
- 3 – Explicit instruction
- 4 – Demo lessons; Peers' ideas; Scripting/planning; Seminar/whole group discussion of teaching ideas and frustrations
- 5 – Observation
- 6 – Training activities
- 7 – Practice teaching (with peers as students)
- 11 – Reflective writing

Academic year (from 3 focus groups with 10 ATs participating)

- 1 – Readings; Working with Mentor Teachers; Experience as a learner; Lecture/input sessions; Scripting/planning; Training activities
- 2 – Observation
- 4 – Demo lessons
- 7 – Reflective writing; Interactions with observer/seminar instructor
- 8 – Peers
- 9 – Classroom teaching
- 11 – Seminar/whole group discussion of teaching ideas & frustrations

Elements of the teaching and learning process

Training (from 10 reflections by each of 3 ATs)

- 1 – Expect the unexpected; Practicing/rehearsing; Teaching with a partner
- 2 – Peers' ideas; Teaching philosophy
- 3 – Management; Self as a learner
- 6 – Teaching techniques
- 9 – Scripting/planning

Academic year (from 11 reflections by each of 5 ATs)

- 4 – Peers' ideas; Practicing/rehearsing; Expect the unexpected; Being a professional teacher
- 5 – Teaching philosophy
- 7 – Teaching with a partner
- 8 – Scripting/planning
- 13 – Working with Mentor Teachers
- 14 – Classroom management
- 17 – Observations of students
- 26 – Teaching techniques