Final Report:

Early College Experience courses as a pipeline for world language teacher education PI: Dr. Michele Back, Neag School of Education, University of Connecticut Graduate Assistant: Joseph Dean, Neag School of Education, University of Connecticut

Project description

Learning world languages has numerous cognitive and academic benefits for all students (e.g., Buriel et al, 1998; Cunningham & Graham, 2000; Demont, 2001; Klein et al, 2014). Yet currently 44 U.S. states, including Connecticut, face a serious shortage of certified world language teachers (ACTFL, 2017). Given that only 20 percent of K-12 students in the United States enroll in world language courses (Mitchell, 2017), it is extremely difficult to find students who are both interested in and capable of teaching languages. Restricting this small pool even further are newly increased proficiency requirements for teacher certification in Connecticut and other states (Connecticut State Department of Education, 2015). Therefore, there is a *critical need* to find innovative ways of recruiting and retaining world language teacher candidates who have an advanced level of proficiency in the languages they will teach. Our project identified the University of Connecticut's Office of Early College Experience (ECE) as a creative and viable pipeline to address the state and national shortage of certified world language teachers.

UConn's Office of Early College Programs and six faculty coordinators work with 237 secondary school teachers throughout the state to provide ECE courses in six languages; Spanish, French, Italian, Latin, Chinese, and German. The advanced level of these courses makes them attractive options for college-bound students interested in world languages education. Given the challenges of recruiting candidates with advanced proficiency in languages other than English, sharing information about opportunities in world language teaching with ECE high school students would be mutually beneficial for students and the profession.

This funded project consisted of an exploratory study to identify barriers and provide information encouraging ECE students to consider a career in world languages education. Through targeted discussions with ECE students and teachers, aided by recruitment tools developed by the American Council on the Teaching of Foreign Languages (ACTFL), it was hoped that this study would a) raise awareness among ECE world language instructors and students about the need for world language teachers and how to prepare for a career in world languages education and b) generate student interest in becoming world language educators while addressing any potential barriers they might anticipate about this career. By providing information and support to ECE students and teachers, it was anticipated that this study would offer important insights on how to attract a larger, more diverse body of world language teacher candidates.

Research questions for this study were therefore as follows:

- RQ 1) What do ECE high school students and teachers know and believe about the opportunities in world language education? What barriers exist that may prohibit students from pursuing a career as world language educators?
- RQ 2) Does raising awareness among ECE world language teachers and students about

careers in world language education increase student interest in becoming world language educators?

Participants and Methods

Although the original study proposed four control groups and four treatment groups, given the limited responses during recruitment, combined with limited time and resources for travel to four different school districts, the study was scaled down to two treatment groups and two control groups. The PI recruited two ECE instructor participants during an annual world language summit held by the Neag School of Education in November of 2017. Two additional ECE instructors were recruited by email to serve as controls for the study using the Office of Early College Programs & UConn Early College Experience's list of ECE language courses and the Department of Literature, Culture and Language's list of email contacts. All four instructors were teaching the ECE version of Spanish 3178 (Intermediate Spanish Composition) during the time of the study. It was decided that Spanish ECE courses should be targeted for this exploratory study due to the high need for Spanish teachers in the state of Connecticut. Of the four instructors, two taught in lower socioeconomic status districts (District Reference Group G), while two taught in higher socioeconomic status districts (District Reference Groups C and D). Fortuitously, one control instructor and one treatment instructor taught in each type of district reference group, allowing for some comparison across groups. Three of the four instructors were compensated for their participation in the study; one instructor was an adjunct professor UConn and, as a state employee, was ineligible for compensation.

The ECE instructors participating in the intervention were asked to implement adapted versions of five free online modules developed by ACTFL. Entitled *Educators Rising*, the modules are designed to be incorporated into existing or new teacher recruitment programs and provide detailed information about the importance of world languages, the current teacher shortage, and important steps for becoming a world language educator. The modules include engaging video clips of model world language teachers and open-ended questions to stimulate discussion. The modules were adapted to include discussion/writing prompts in the target language (in this case, Spanish) as well as additional, more culturally relevant materials (see attached curriculum for details).

The ECE instructors were asked to implement the modules either as part of the ECE course or as an after-school or lunchtime activity for ECE world language students; both instructors chose to implement the modules as part of their ECE courses, with students responding to the open-ended questions in writing. At the conclusion of the modules, the PI and a graduate assistant visited participant courses to conduct focus group discussions in order to gather information on student perceptions of and orientation towards pursuing a career in world languages education.

Because these were ECE courses focused on writing in Spanish, student responses to each module were collected as data. Student responses were de-identified by the instructor and assigned a code by the researcher. In addition, the focus group discussion was audio recorded and transcribed. While student written responses were in Spanish, the focus group discussion took place in both English and Spanish to allow for full exploration of the issues in both languages. Finally, a preand post-intervention survey focusing on interest in world languages education was administered to both the treatment and control courses in order to measure any changes in beliefs or interest that

might have occurred over the course of the semester. Activities, from recruitment to the enactment of modules to the post-intervention survey, took place during the spring semester of 2018.

Quantitative data were analyzed via nonparametric statistical tests for nominal data. Metrics for success included a) significant increases in the amount of "yes" and "maybe" responses by the intervention group (in relation to the control group) on survey prompt #4 (Are you currently interested in becoming a K-12 world (foreign) language teacher?) and b) significant increases in the amount of email addresses left by the intervention group (in relation to the control group) in response to survey prompt #9 (Please leave your email here if you would like more information about the University of Connecticut's teacher certification programs in world languages education). After analysis, the second metric was found to not be viable, as respondents in both the intervention and control group left their email addresses at higher rates in the first survey versus the second survey. The PI determined that respondents assumed they did not have to leave their email twice, leading to a decline in the amount of email addresses in the second, post-intervention survey. Therefore, this metric is not reported on in the findings below.

Qualitative data from the written prompts, audio-recorded responses to discussion prompts, and audio-recorded focus group discussions were analyzed using constructivist grounded theory methods. Charmaz's (1995, 2006) approach to Glaser and Strauss's (1967) original conception of grounded theory emphasized how the interaction between the researcher and the informants "produces the data, and therefore the meanings that the researcher observes and defines" (Charmaz 1995, p. 35). After recording and transcribing focus group sessions, the researcher and graduate assistant conducted open coding, followed by select coding and analytic memo writing, arriving at several relevant themes and subthemes (see below). Metrics for program success included a higher level of interest in world languages education among ECE students receiving the intervention, as analyzed in written and oral responses to prompts as well as audiotaped focus group sessions. In addition, the researcher was interested in what reasons participants gave for their interest (or lack thereof) in becoming a world languages teacher. The combination of qualitative and quantitative data permitted a triangulation of inferences regarding participant beliefs about and interest in language learning and becoming language teachers.

Study procedures and timeline

Date	Procedure			
January-March, 2018	Recruitment of ECE world language instructors from partnership			
	schools and ECE contact list.			
March 13, 2018	IRB approval obtained.			
March 14, 2018	Before treatment, administration of pre-intervention survey for			
	participant schools 1 and 2 and control schools 4 and 5.			
March 20-June 4, 2018	Students in participant schools 1 and 2 complete written responses			
	to modules 1-5.			
June 2018	Focus group discussions with students in participant schools 1 and 2.			
June 2018	After focus groups, administration of post-intervention survey for			
	participant schools 1 and 2 and control schools 4 and 5.			
June-August 2018	Preliminary data analysis			

September-February 2019	Secondary data analysis.
March 2019	Submission of final report to Office of Early College Programs & UConn Early College Experience.
May 2019 (estimated)	Submission of results to peer-reviewed journal.

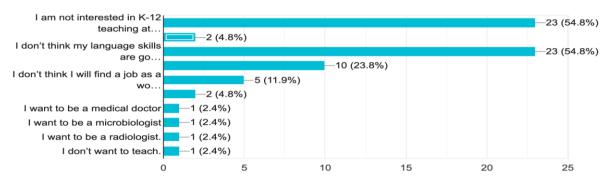
Findings

As indicated previously, the goals of this project were to discover what beliefs and knowledge ECE students have regarding world language education and evaluate the role of information sharing and awareness raising on the number of ECE students interested in becoming world language educators.

Quantitative findings: Survey data

With respect to RQ1 (What do ECE high school students and teachers know and believe about the opportunities in world language education? What barriers exist that may prohibit students from pursuing a career as world language educators?), proficiency in the target language was a key concern among respondents when describing their lack of desire to pursue a career in world languages. In the pre-intervention survey (n=42), 23 respondents (54%) chose the phrase "I don't think my language skills are good enough to be a world language teacher" as one of the reasons they did not want to pursue world language teaching. This response was tied for the most frequently chosen reason for not pursuing world languages education, along with "I am not interested in K-12 teaching at all," (23 respondents, 54%).\(^1\) The next most popular answer was, "I don't think I will find a job as a world languages teacher," with five respondents (11.9%). Other responses, with number of respondents indicated for each category, included "I think learning languages is boring" (two respondents); "I am interested in K-12 teaching, but not in world languages" (two respondents), and interests in other careers (e.g., "I want to be a medical doctor," or "I want to be a radiologist," with one respondent each). Figure 1 shows a visual breakdown of these responses.

Figure 1: Responses to pre-intervention survey question #6: "[...] please indicate the reasons why you are not interested in becoming a world languages teacher."



¹ Respondents were allowed to pick more than one answer for Questions 6 and 7, which explains the total percentage count exceeding 100.

A related question in the pre-intervention survey (Question 7) asked "What might change your mind about world languages teaching?" The most popular response was "Nothing would change my mind—I am really not interested in becoming a world languages teacher," with 25 respondents (58.1%). However, "If my language skills were better" was chosen by 13 respondents (30%), which correlated to a similar response in Question 6 ("I don't think my language skills are good enough to be a world languages teacher"). Other responses included "If I had more information about careers in world languages education" (9 respondents, 20.9%); "If I had more information about teacher certification programs" (four respondents, 9.3%); and "If I had information about new ways to teach languages (three respondents, 7%).

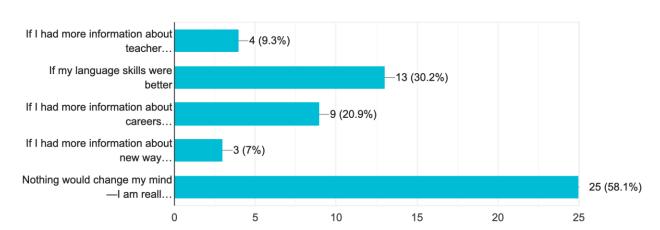


Figure 2: Responses to pre-intervention survey question #7: "What might change your mind about world languages teaching?"

To address RQ2 (Does raising awareness among ECE world language teachers and students about careers in world language education increase student interest in becoming world language educators?), quantitative data from the pre- and post-tests for both the control and treatment schools was analyzed using chi-squared tests. The metric for success looked for was a significant increase in the amount of "yes" and/or "maybe" responses by the intervention group on the post-test, either in relation to their own pre-test data or in comparison to the control group, on survey prompt #4 (Are you currently interested in becoming a K-12 world (foreign) language teacher?). The number of "yes," "no," and "maybe" responses on the surveys both pre- and post-intervention are included below in Table 1.

Table 1. "Yes, "no," and "maybe" responses on the pre- and post-surveys for the control and intervention groups.

Pre-Intervention				
	No	Maybe	Yes	Total
Control responses	5	1	0	6

Intervention responses	25	3	0	28
Post-Intervention				
	No	Maybe	Yes	Total
Control responses	9	1	0	10
Intervention responses	10	3	1	14

As students completed the pre- and post-tests at different times and in different settings depending on the instructors' implementation of the survey component of the study, it should be noted that there are differing numbers of responses to each survey. However, a quick evaluation of the responses showed the same number of "maybe" and one additional "yes" response for the intervention group despite a smaller n when compared to its pre-test, suggesting that further analysis was warranted and that there may have been some effect from the intervention. To assess this, two chi-squared tests were conducted. The first assessed whether or not there was a significant increase in the instance of "yes" and "maybe" responses on the post-tests of the control and intervention groups. The results of this test are seen in Table 2.

Table 2: χ^2 analysis comparing the post-surveys of the control and intervention groups.

	No	Maybe	Yes	χ^2
Control responses	9	1	0	0.9649
(Expected)	(7.9167)	(0.4167)	(0)	
Intervention responses	10	3	1	4.1667
(Expected)	(5.8333)	(1.75)	(0.5833)	

The chi value yielded of 5.1316 being smaller than the chi critical value of 5.991, it is not possible to reject the null hypothesis at the .05 significance level. There is insufficient evidence of difference between the control and intervention groups' responses.

A second chi squared test was conducted to compare the student responses in the intervention group on their pre-survey to their responses after receiving the intervention. The results of the analysis are shown below in Table 3.

Table 3. χ^2 analysis comparing the pre- and post-surveys of the intervention group.

No	Maybe	Yes	χ^2

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Pre-test responses	25	3	0	4.6667
(Expected)	(16.6667)	(2)	(0)	
Post-test responses	10	3	1	18.6667
(Expected)	(3.3333)	(1)	(0.3333)	

The chi value yielded by this test of 23.3333 did exceed the chi critical value of 5.991, indicating there is evidence of a significant difference between the responses pre- and post-surveys of the intervention group. Based on this, in response to RQ2, we can conclude that the intervention, by raising awareness among ECE world language teachers and students about careers in world language education, did increase student interest in becoming world language educators. However, the total number of changes in responses is small and the varying response rates to the surveys may muddy the picture, and, as we discuss in the following section, there is evidence from the student focus groups and module responses that there are areas where the intervention could better respond to their concerns.

Qualitative findings: Written responses to modules

Consideration of student responses to each module reveal four themes that reflect student beliefs and preconceptions about teaching as a profession and their own suitability to be language teachers specifically. These themes provide insight into student concerns and the ways in which each of the curricular modules addressed or failed to address them.

The first theme in the student responses that was identified was a belief that teachers have a positive impact on their students. Many of the responses indicated that the students are also interested in having this sort of impact. Examples of this belief and student interest in it can be seen in these quotes from the writing samples for Module 1 (translated to English; the original student Spanish, errors included, is below in footnotes): "teachers have a huge impact on my life... I would like to have the same effect²", "I would say I earn an opportunity to touch thousands of lives³," "of course I would like to be able to make a difference in the life of a student⁴," and "teachers positively influence the lives of students... I would like to do these things because I like to help people like my friends to be the best they can be⁵."

Of all the curricular materials and prompts, the first module was the one in which this theme was most prevalent -88% (n=15) of respondents to this module indicated agreement with the idea that teachers make a significant difference in students' lives. Many of the responses also included a personal desire to make a similar sort of difference in others' lives in keeping with the theme. This sort of response is harder to pin down mathematically, as some of the students chose to respond to

² "maestros tienen un impacto muy grande en mi vida... me gustaría a tener una efecto mismo"

³ "Yo diria yo gano una oportunidad de tocar miles de vidas"

⁴ "Claro que me gustaría poder hacer una diferencia en la vida de un estudiante"

⁵ "Los maestros influyen positivamente en la vida de los estudiantes... me gustaría hacer estas cosas porque me gusta ayudar a la gente como mis amigos a ser lo mejor que pueden ser."

the prompt as though they were a teacher, defending the profession specifically, while others wrote to how they would want to make a difference *similar* to what a teacher makes. Nonetheless, the notion of "making a difference" is written to favorably by the students and many of them mentioned a personal desire to do so in the future.

A second theme was a concern about working with children, and in particular about having the patience to do so on a daily basis. This theme is most seen in responses to Modules 1 and 2, likely because these two modules address the teaching profession most directly, while Modules 3, 4, and 5 focus more on the benefits of language learning. Patience is a theme that appeared to be prominently in students' minds, as it was also brought up in the focus groups (see below). Examples of student reactions around this theme include the following response from Module 1: "I wouldn't want to do those things because I wouldn't have the patience to deal with kids⁶" and, from Module 2, the following "I think it would be difficult to work with kids who don't want to learn. It would be hard when kids lack motivation... I don't think I could go to work every day without knowing if the kids are going to listen to me⁷."

The third theme identified in the responses was the conception of a teacher as being underpaid relative to the workload – this theme is evident as well in student responses that it 'takes a special sort of person' to deal with the particular circumstances of being a teacher. This theme of compensation versus workload was most common in Module 2 responses, as well as in the focus groups. 50% (n=8) of the responses to this module included mention of salary as a concern, with responses such as "at the same time, it would be very difficult to live independently with the salary of a teacher and still have money for a family⁸" and "it seems very hard to me, the pay and amount of work⁹."

A final theme identified, which appeared frequently in responses to Modules 3, 4 and 5 as well as the focus groups, was the value in continued study of world languages. The curriculum seems to have done a good job of ingraining this sentiment. Among the positive responses to the idea of the usefulness of continued language study were statements such as: "Spanish has allowed me to learn more about Spanish speaking cultures¹⁰," "I hope to use my abilities in the Spanish language in my future as a nurse¹¹" and "Speaking Spanish will be useful in my future career¹²."

Qualitative findings: Focus groups

Focus group discussions mainly corroborated and expanded upon three of the four themes that surfaced in the written responses to the curricular modules; that is, the need for patience, the inequity of teacher compensation relative to the workload, and the value of learning languages. Regarding the first theme, when Focus Group A was asked about what someone needs in order to

⁶ No me gustaría hacer esas cosas porque no tendría la paciencia para lidiar con los niños"

⁷ Creo que sería dificíl tartar con niños que no quieren aprender. Sería difícil cuando los niños no tienen motivación... No creo que pueda ir a trabajar todos los días sin saber si los niños me van a escuchar"

⁸ "Al mismo tiempo, sería muy difícil vivir independientemente con el salario de un profesor y mantener dinero por una familia"

⁹ "Me puede parecer muy dificil, la paga y la cantidad de trabajo"

¹⁰ "El español me ha permitido a aprender más sobre las culturas hispanohablantes"

¹¹ "Espero usar mis habilidades en el idioma español en mi futuro como enfermera"

^{12 &}quot;Hablar español será útil en mi futura carrera"

be a teacher, the first, immediate response was "Patience," followed by a bit of an elaboration: "let's say like a student didn't understand like a math problem or something, [what's important is] having the patience to keep repeating and keep trying to help them understand." In Focus Group B, patience was also a key concern, with this caveat for world language teachers: "Especially for like language teachers I feel like there needs to be a lot of patience because we can struggle at times" (our emphasis). The concern is evident indirectly in other responses, most particularly when students made statements such as "I realized I'd be an awful teacher because I'd yell at the students" (Focus Group B, our emphasis). The need for teacher patience was frequent in student reasons as to why they were uninterested in entering the profession. This issue did not appear to be addressed in curricular materials, as evidenced by their continued concerns – with no mention of any materials helping them with those concerns – during the focus groups.

The notion of teacher compensation was also an important component of focus group discussions. In Focus Group A, this theme is echoed with statements such as "it's a hard job and you get paid so low it doesn't seem to be worth it" and "they're underpaid," and in Focus Group B students added "you don't make a lot of money and you have to take your work home with you" (our emphasis) It is important to note that these responses didn't necessarily focus on the amount of money, but rather on teachers as being 'underpaid' relative to the workload – this sort of fairness issue appears to have an impact on the students' desire to be teachers over and above the questions about the absolute values of salary.

The value of learning languages also surfaced in the focus groups, with several students mentioning the possibility of minoring in Spanish in college, with the idea that it would help them in their futures. Some focus group comments gave credit to the modules for this idea, as evidenced by one student saying "I didn't really think about taking Spanish in college *until this whole thing you know*" and a second following up to say "I was thinking about going into business and *still taking Spanish in college* just cause to be able to communicate with people." Although the initial purpose of the program focused on world language teacher recruitment, seeing this sort of effect on student responses suggests a different area in which the curricular materials – particularly Modules 3, 4, and 5—are having an impact on the students.

Finally, the focus groups gave us the opportunity to explore the notion of target language proficiency in relation to pursuing a teaching career. Several of the participants spoke in general terms about how world language teachers need an in-depth knowledge of the language being taught; examples from three participants include, "you have to like know what you're teaching like *really really well*;" "you have to be like *super fluent* in the language;" "Some people think they don't speak the language well enough to teach it" (Focus Group B, our emphasis). It is interesting to note the usage of second and third person in these examples, with focus group participants appearing to distance themselves from the notion of language proficiency.

When the notion of fluency/proficiency was probed a bit further, one student mentioned the notion of idiomatic expressions; "there's a lot of idioms that you need to get used to just over time by practicing and listening to native speakers." However, one student did see a value in having a teacher whose first language was not the target language: "That's not [teacher's] first language so she understands the process of like learning it. Than like someone who like natural speaks that language might not understand the struggles" (Focus Group B, our emphasis).

It is also important to note that this issue did not surface as directly in Focus Group A; that is, none of the participants explicitly stated that they would not become a language teacher due to concerns about their own language proficiency. This may be because many of the participants in Focus Group A were heritage speakers of Spanish. The notion of proficiency in general did, however, come up with regard to oral proficiency among the heritage speakers, who felt that they needed more work in that area. A long discussion ensued regarding the concept of what constitutes "correct" Spanish, with many participants in Focus Group A expressing the sentiment that their Spanish was not "correct." It is possible that this perception of their own Spanish abilities may have led to concerns about teaching a "non-correct" form; however, this connection was not explicitly drawn by the participants.

Implications for the Curriculum and for Student Recruitment

From these themes, a few implications for the curriculum are suggested. First, the program does a good job of selling the message the teachers have a positive impact, and it is evident in student responses that they are interested in having a similar impact. The point is made most successfully in Module 1, which several students in the focus groups indicated was their favorite. The point may be belabored, however, as summarized by a student in Focus Group B, who said "it was kind of repetitive, like oh yeah, teaching's rewarding, we kind of got that each time," an issue if the messaging does not also address student concerns. Among the concerns that were most evident in student responses were concerns about the pay compared to the workload and concerns about working with children and the patience required to do so. As these concerns were voiced most consistently after Module 2, it would seem that more could be done in the curriculum to address them. Specifically, Module 2 could be revisited to include specific information on salary and teaching dispositions, as it elicited the majority of these responses without successfully speaking to those issues.

In the modules, the salary issue is mentioned, though usually in the sense of teaching being rewarding *despite* the pay, or that if one wishes to make the sort of difference a teacher makes, the pay should be secondary. One student indicated that this approach helped her, saying in the focus group "I've learned that like *salary shouldn't be like your deciding factor*. Like if you want to change peoples' lives, *the salary shouldn't stop you from doing that*" and also that "*it definitely changed my perspective* like on the salary" (Focus group B, our emphasis). However, the prevalence of the salary concern, with many indicating it and the accompanying perceived workload were significant factors in decisions not to look into the profession, suggest that the curriculum could do a better job of providing education on the pay issue and the workload if it seeks to counteract student preconceptions.

Lastly, the final three modules, in eliciting responses in favor of continued language study, including some that were not otherwise considering it, do a good job of encouraging world language education. There could, however, perhaps be more done in the curriculum to push teaching as well as continuing to learn languages. This could be done in conjunction with addressing an additional student concern: students did indicate insecurity about their language proficiency as well as a lack of knowledge about the proficiency required to function in and teach the language. Providing information on proficiency requirements as it relates to teaching may help

to bridge the gap between encouraging further language study and helping them to believe they may be capable of going into the world language teaching profession.

Immediate and Perceived Future Impact

The PI has already begun to disseminate this research via conference presentations. In November of 2018 she presented the curriculum at the annual meetings of the American Council on the Teaching of Foreign Languages (ACTFL). In March of 2019 she will present findings at Central Connecticut State University's 13th Conference for Language Teachers. In addition, the PI has shared the adapted curriculum with partnership schools in cooperating school districts, including the control groups of this study. Attendees of the ACTFL conference and recipients of the curriculum have been positive in their assessment of the curriculum's possibilities. The PI will continue to disseminate the curriculum to her contacts while monitoring any related enrollments into both Neag's world languages education program and other education programs across the state. The PI also plans to work directly with ACTFL on a focus group related to the *Educators Rising* materials; it is hoped that findings from this study will have a positive impact on future iterations of these modules. Finally, the PI is working with her graduate assistant on a journal article based on these findings, to be submitted to a top-tier journal in world languages education sometime in May.

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