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The Editor
Learning and Instruction

Dear Sir or Madam:

I am submitting the associated manuscript, "Place and Space in Yeni Foça, Turkey: An Interdisciplinary Analysis of the Olive Culture in a small village" for your consideration. I am the corresponding author, and include Richard Blatchly of Keene State College, Patricia O'Hara of Amherst College, Christian Wernz of Virginia Tech and Meltem Türköz of Işık University as co-authors.

This manuscript presents the description and results of an innovative interdisciplinary and intercultural learning program, that brought together prominent scholars from around the world and community members of a small village in Turkey. Even though it was only for a temporary period of time, a scholarly community was quickly established and provided a sense of global connectedness to the residents of the small village and a sense of rejuvenation for academics. The realization of the program despite all academic, social and financial obstacles was remarkable. We believe the program presents great potential and lessons to be learned regarding active citizenship training therefore as educators from various institutions we feel it is important to inform our colleagues about this valuable experience. We welcome any suggestions and further questions.

Manuscript Word Count: 5986 words, including references

We appreciate your consideration.

Sincerely,



Zeynep Delen, Ph.D
Five Colleges Inc Affiliate Chemistry
Ege'de Atölye Director

PLACE AND SPACE IN YENI FOÇA, TURKEY: AN INTERDISCIPLINARY ANALYSIS OF
THE OLIVE CULTURE IN A SMALL VILLAGE

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Highlights

- A locally relevant topic eases communication between community and scholars.
- Increasing global popularity of the study topic inspires participants to contribute.
- Cross-cultural and cross-disciplinary communication is important for faculty development.
- Respecting the authority of the community improves the success of the program.

Abstract

We have designed a community based learning workshop in Yeni Foça, a small town in western Turkey. Community members join with domestic and international students to investigate the place of olives in the community. Using methods of inquiry from anthropological research, we seek to understand the communities' history and memories of olive picking. Using decision analytic methods, we seek to advise communities on how to make better decisions for their future. Finally, using scientific reasoning and experimentation, we work together to explore the chemistry of the olive and how it impacts the quality of the olive oil. In particular, we were interested in understanding the challenges this community faces in producing olives for the world market, in which standards for quality are set which can sometimes sit at odds with local taste. At the same time, we observed a community striving to hold on to local ideals in the face of change.

Keywords: Multidisciplinary, community based, international learning

Introduction

This paper presents the results of a pilot program implementing an inquiry based liberal arts curriculum focusing on the olive situated in the Aegean town of Yeni Foça, Turkey. In presenting these results, the authors explore the following pedagogical issues: modeling and integrating multidisciplinary analysis, utilizing place specific problems to motivate meaningful inquiry-based learning and creating a classroom environment that values process over product.

As it does across the Mediterranean, olive culture has deep roots in Yeni Foça and its surrounding region. Ancient trees thought to be thousands of years old can be found on the edge of town. Most of the villagers have picked olives, own olive groves, work the olive presses, or just simply eat olives and use olive oil on a daily basis. Just as olive picking is a common thread in local life stories, so is strong opinion as to the right taste of olive oil. As the olive oil market is rapidly expanding, many hope to bring profit to the region by finding a global market for their oil. Local visionaries hope to bring the world's attention to the high quality oil that has been produced in the region for millennia. Along with the opportunities for further development of an olive oil market, development, industry, and modernization are seen as a threat to the physical and social environment.

In Foça, the authors drew from the cultural geographic concept of place and the scientific delineation of space to help create a dialogue between our respective disciplinary methods, but also as a way to engage students in our particular location. We asked who lives here and how we

might provide a means for the Foçaian people to hold onto their own histories. We hoped we might help demystify the technical world standards for olive oil that sometimes are at odds to their own sense of what is a quality olive oil.

For two weeks each summer for two years, scholars from chemistry, folklore and anthropology, and engineering collaborated to bring multidisciplinary scrutiny to the olive. The starting point for the endeavor was to create an alternative teaching and learning environment inspired by the liberal arts approach. Turkish students often come out of an academic experience closer to what Brian Crose describes as the Eastern academic experience (Crose 2011), where the emphasis is on academic success as measured by standardized tests. Here a teacher is viewed as the possessor of all knowledge and the student is expected to absorb the knowledge as opposed to engaging in a dialogue as part of the learning process. Students who go through the national education system in Turkey experience a standardized exam-driven form of learning, and thus are unfamiliar, if not uncomfortable with learning situations in which they are asked to take charge of their learning process (Çelik, 2012). Students familiar with the liberal arts model of learning might be more at home in this model, but rarely have they been asked to integrate the ideas from such diverse disciplines and to apply them to problems where the outcomes really matter. Inquiry is expected as students and teachers challenge each other to seek further insight (Eaves, 2009).

The workshop was structured into collaborative modules; each designed to engage the participants in disciplinary ways of thinking about the olive, its products, and its producers but flexible enough to respond to new directions of inquiry. Complementing these modules we had keynote speakers, one of whom gave a public lecture geared towards local growers and residents. From the beginning we were all cognizant that this project had to be reciprocal with, and

respectful towards members of the local community and local government (Heffner, Zandee, & Schwander, 2011). In the end, we put the disciplinary pieces back together into a tangible product that we could deliver that would be of benefit to the community.

Several of the curricular modules we implemented for this workshop are described and the results analyzed to provide examples of cross-disciplinary learning and teaching through the concepts of space and place (Plein, 2011; Relph 1976). We conclude with a set of recommendations.

The workshop is not just about teaching the olive, they study the environment, history, culture and all other aspects using liberal arts method. You may not agree with the information but you are encouraged to present your ideas and discuss.

**Hasan Köşklü, Parent of 2011 Participant;
Olive Grower and Community Partner**

The Right to Question

Module 1: A Sense of Place: Yeni Foça is a small Turkish village (3,700 population) with a rich and complex history that includes ancient Foçaian sailors, economic development of alum deposits by Genoese in the thirteenth century, and settlement by Greek fisherman and olive growers for several centuries after that. Pre-readings for participants served to place Yeni Foça in its historical context and to show that the relationship to the olive in this region was shaped by a history of forced migration. Under the Ottoman Empire, the western coast of Turkey had a multiethnic population with religious diversity (Hirchon, 2003). With the decline of the Empire the demographics of the coastal cities and towns were transformed. From the early 19th century, claims for national sovereignty, followed by the Balkan Wars in 1912-1913 left the region with great instability. By the end of World War I, over 1.5 million people were forcibly evicted from their homelands in a massive population exchange in compliance with the Lausanne Convention

(1922-1923) that was meant to provide political stability to the region by fostering the un-mixing of Greeks and Turks. The definition of who was Greek and who was Turk was done according to a religiously defined concept of ethnicity. This short-term solution to hostilities between two sides resulted in villages that had housed the fishing and olive farming (Christian) Anatolian Greeks for hundreds of years being emptied of all but a few resident Turks, and later re-filled with tobacco farming (Muslim) Turks from central Greece (Keyder, 2005). Today, a great majority of residents of Yeni Foça are descendants of migrants who fled wars or who were settled in Turkey as a result of the population exchange.

In our first workshop year, after participants were introduced to ethnography as a core method of research in cultural anthropology and folklore, we asked residents to narrate stories of olive picking and growing. The loss of knowledge for the care of the olive groves, the ways of the sea, and the stewardship of this “new” land is a problem that resonates in the stories and the still vacant stone homes now in ruins in the village. A representative of the local olive oil cooperative told a story to 2011 participants Bilge Fırat and Denis O’Hearn that illustrates the uneasy stewardship of the olive lands:

An Orthodox Greek man who had to leave these shores in the population exchange left his olive grove to the care of a local Turkish man, telling him that he must turn the soil seven times each season for the trees to be healthy. Returning for a visit, the Greek found the Turkish tenant. He asked to see a bowl of the olive oil, dropped a piece of cotton into the bowl, and after extracting the cotton, pressed it between the pages of a notebook he carried. He turned to the Turk and asked if he had taken good care of the orchard.

“So you did what I asked,” said the Greek, “You tended the groves well?”

“Yes,” replied the Turk, “I looked after the trees as if they were my own.”

“And you remember our agreement? You turned the soil seven times like we agreed.”

“Yes and look what fine oil the olives produced.”

After their coffee and conversation, the Greek picked up his notebook. He looked at the oil stain on the page of his notebook and he began to turn the pages to see how far the stain went through. One, two, three...The oil stain had soaked through five pages.

“You lied to me,” he told his tenant. “You only turned the soil five times. If you’d done as I told you this stain would have gone through seven pages. Our agreement is over. I must find someone else to tend my groves.”

In another story, a local restaurant owner whose grandfather emigrated from Romania, tells us that while the former residents built their homes on the least fertile portion of a field, the current Turks naively construct homes on the fertile parts of the land. Residents blame themselves for not having the longstanding wisdom of the former Greek residents. Their stories contain this common theme of concern over loss of the knowledge of the past and a concern for the preservation of this heritage for the future.

Moved by these stories, we refined our questions in the second year to solicit responses from the residents regarding their personal relationship to Yeni Foça itself. Today the town’s breathtaking harbor, clear waters, and constant breezes make it an attractive vacation spot for city dwellers from far-away Istanbul and Ankara to nearby Izmir. Industrial development threatens as plans are in place to add a geothermal power plant to the half a dozen manufacturing plants that already produce significant amount of particulate air pollution in an adjacent valley. Local grove owners worry that the fragile ecology that currently provides a unique environment for the local olive will be destroyed.

We introduced to our participants the concepts of place and space as a way to think about our location and change. As Smale points out “Place shifts attention to the subjective or lived

experience of location, to the profound meanings we ascribe to it” (Smale, 2006). While space is measurable geometrically and with numbers, place is defined through subjectivity. This perspective on place was developed by Tuan in the 1970s (Tuan, 1974). The literature on space and place is worth many pages of discussion but for the purposes of this module they anchored concepts equivalent to “etic” (noted by observers outside the culture), and “emic” (noted by those within the culture). Our year two participants were asked to elicit narratives of place by asking locals two questions. “If you were to leave Yeni Foça, which place, or aspect would you miss the most?” and “Where in Yeni Foça do you feel at peace?”

While we found both ethnographic questions useful in framing related scientific questions, the discussion of place was particularly powerful. Because the duality of place and space expressly employs the relationship between the personal and the non-personal, we could have a very fruitful discussion about the relationship between the two ways of knowing. In considering the order of attacking these two questions, it seemed more productive to begin where the students were more likely to respond (a personal description of place), show how their definitions were different from the locals, and then move to the scientific measure of space to discuss methods of scientific inquiry.

Module 2: A Measure of Space: The olive itself has as gloriously complicated a story as the region itself. We transitioned from the discussion of place to one of space in an olive grove. Space became for us a metaphor for the more quantitative aspects of our inspirational topic. Here, we asked students and community partners to develop a question that might be relevant to the owner of this grove, one that could be answered using quantitative thinking and counting or measuring. We emphasized the need to have an organizing question (hypothesis) that would

dictate which measurements we would make. We highlighted the tools of scientific inquiry: reproducibility, accuracy, precision, and use of controls. Small groups of students and partners were asked to use (or develop) a measuring device and given a period of time to both develop their question and do some preliminary measurements. We then gathered together and groups reported the questions they had asked, the tool they had created to perform the measurements, and the preliminary results they had obtained. Our participants reported that the concept of validating a tool through the use of controls and asking if this was indeed the right tool to use was new to them.

Our next scientific unit focused on the molecular aspects olive oil. Olive Oil standards set by the EU and the US are - at one level - meant to protect the consumers by asking producers to measure and report levels of compounds that indicate bad quality or fraudulent oil (Montealege et al 2010). It was our goal to show that it was not necessary to be a specialist to understand the chemistry of olive oil and the standards. Using hand held molecular models and simple means for chemical analysis, we developed the capacity for everyone to understand the molecular structures and the tests for detecting the presence of the key chemical markers of quality. Once again, we emphasized the use of controls to demonstrate the validity of our analyses. Our crude measures allowed us to detect the presence of these key chemicals such as free fatty acids and antioxidants, but not the quantity. We also performed tests on the local oils (and some controls) to demonstrate the presence of these healthy compounds (Frankel, 2011).

Module 3: Decision Science: We were trained in the basics of decision analysis, which provides methods to individuals and groups to “engineer” better decisions. In the first step of decision analysis, one identifies preferences from which measurable goals are derived. Next, the decision space is analyzed, by identifying and exploring decision options. Oftentimes, people

looks at a complex decision problem too narrowly and overlook important decision alternatives. Uncertainties are usually present and a decisions leads only with a certain probability to an outcome. Consequentially, the probabilistic link between decisions and their outcomes needs to be estimated based on the available information. Finally, the decision alternatives are evaluated in terms of how well they contribute to the set goals. A rank-ordered list of decision alternatives is the result. Of course, participants can further discuss the results and revise their assessment. Decision analysis is a merely a structured process that helps people think about hard problems. In the end, people make the decision.

We applied decision analysis to decide how we can give back to the community and leave Yeni Foça with a tangible product that would be of benefit to the community. We weighed benefits and costs and long-term impacts of our presence in the community. Our initial somewhat romantic notion of providing a dinner for our local community was discarded when we realized that many of our community partners were in the restaurant business and could not attend a meal at a time that was, for them, prime business time. A second idea of a community garden was similarly discarded when we realized that the maintenance of such a facility would ultimately be more burdensome to the community than pleasurable.

Through the decision analytic process, we came to consensus to publish a Zeytin (Turkish for olive) Calendar for 2012 to gift to community members and to raise the impact of our programming both here in Yeni Foça and abroad. Participants or pairs of participants took responsibility for each month, and we mapped out a twelve-month calendar in which each month would mark a phase of olive production or olive culture. Participants got to work with the text for their month. We would augment the calendar with photos that we had taken. Back home, the Ege'de Atölye staff would assemble and translate, and a bilingual product was in place by

January 2012 that we distributed to our community partners in Yeni Foça, participants, and prospective students in Turkey and abroad. A copy of this calendar is included in the supplemental materials.

Interdisciplinary Observations

Etic vs Emic: What should a good olive oil taste like? Hakan Barçın, owner of the new upscale Taş Köy restaurant and olive oil press ran a tasting for us, hoping to teach the high gastronomy of olive oil. His waiters set up the tasting on spotless blue and white tablecloths with olive wood folk art products all around. His restaurant and the olive press itself are immaculate and new. He himself had relocated to this area about 10 years ago after becoming disenchanted with the academic life of an Instructor of English. He had poured his heart, soul, and considerable entrepreneurial skills into Taş Köy. His oil is beginning to gain favorable attention in foreign markets.

Four oils were laid out for our tasting. They were poured into individual bowls labeled A, B, C, and D. Placemats served as rating sheets. Hakan asked us to note the color (renk), and indicate from 1-4 our least to most favorite. He then demonstrated how to warm the oil by cupping his palm around the bowl - and when the oil was close to body temperature - how to form a little cave over the oil with your other hand and take a deep sniff as shown in Figure 1. Again, we rated the aroma (koku) from 1-4. From there, he demonstrated how to properly taste (tat): a slurping of the oil and a thorough coating of your mouth, noting the bitterness on the back of the tongue and how the oil coated the rest of your mouth. “As the liquid is swallowed,” he said, “... a good oil will produce a cough in the back of the throat” (pungency). We summed the categories to evaluate our total points for each liquid.

Why did we not learn chemistry like this? After seeing the molecules in 3D, I will never forget them.

Gülsün Durak, 2012 Participant

Here came the moment of truth. Our host asked for our final ratings. As we reported our findings one by one, his eyes light up with amusement. He revealed the oils’ identities to us. Only a few of us had selected the organic oil, a rare wild (delice) olive oil, or the blended gourmet product as one of our top choices. Several had chosen an oil Hakan characterized as stale oil, 2-3 years old, as our favorite. While those of us with uneducated palates felt suitably chastised, one of our community partners disagreed with Hakan’s ratings. Kadir was born and raised in Yeni Foça, had fished since childhood and now owned one of the most successful restaurants along the harbor. Kadir’s blind ratings had been, according to Hakan, exactly backwards. His number 1 choice was the oil declared by this relative newcomer as old and stale.

Dismissively waving at the boutique oils, Kadir declared, “If I served this at my restaurant it would be sent back.”

Could our chemical analyses help us resolve this disagreement? Was there a chemical difference we could detect in the oils that might explain how one was better than the other? We spent the next few days analyzing the oils for the chemical compounds that give rise to the colors (carotenes, luteins and chlorophylls), the antioxidant phenols, the damaging peroxides, the amount of unsaturation, and the free fatty acid (FFA) content. The FFA is an objective measure of how well the trees and olives had been tended, and how well the pressing process had gone. While the FFA does not affect the taste, the oil would lose its status as either extra virgin or virgin if the FFA levels are too high (virgin olive oils have a FFA less than 2% and extra virgin oils have less than 0.8%). According to new EU standards, olive oil above 3.3% is not suitable for human consumption although some locals are skeptical about these new and foreign standards. They consider 1- 3 % acidity fine olive oil. We were told up to 5 % acidity used to be consumed. Our analysis, while crude, revealed no measureable difference in phenol, peroxide content, or FFA in any of the oils we tested. All were of high quality, with no measureable peroxides, a FFA below 0.8% or meriting an extra virgin characterization, and with plenty of the antioxidants that give rise to the health benefits and some chlorophyll. Making the connections between the tests we did and the molecules in the olive oil was satisfying for the participants, even if it did not resolve the disagreement about taste.

Much of the flavor of the oils is a complex interplay of taste and smell and it is known that small molecules give rise to the f

- , D.

L. & Aparicio, R., 2010). The pungency our cough in the back of the throat is due to a compound

known as oleocanthal, which behaves similarly to the analgesic ibuprofen. While these natural compounds are important to the taste and perhaps the health benefits of olive oil, they exist in extremely small amounts in the oil (Cornwell & Ma, 2008). While a more sophisticated, time-consuming and expensive analyses could perhaps make these distinctions, it allowed us to reflect on the marvelous sensitivity and discrimination of the human taste. Kadir and Hakan were in fact agreeing on the taste – they were just not agreeing on the attractiveness of the taste.

We conducted many of our chemical experiments in a large room overlooking the harbor above the same fish restaurant that belonged to Kadir. Shortly after our trip to Taş Köy, Kadir’s mother kindly and apologetically came upstairs to interrupt our experiments. She wanted to clarify the dispute about the wild (delice) oil. She agreed that delice was the highest quality oil but said that good oil is not bitter and does not “burn the throat”. She asked why would anyone eat unpleasant oil? Her passion was clear and she hoped that she could be of help in this debate. In the end, we could see that an ‘emic’ or authentic analysis gave one answer while the ‘etic’ or external analysis gave another – and our science was not going to give us a clear-cut distinction.

I realize how scientific thought is missing from our lives. I learned not just for today, but for life.

**Deniz Kurtsan, 2012
Nimfeon Organic Olive Oils
Community Partner**

Searching for Authenticity in a Global Market: As part of the workshop, Virginia Brown Keyder, Associate Professor of Political Science at Binghamton, Adjunct Professor of Boğaziçi and Sabancı Universities was asked to speak in a public presentation on “Olive and the Law”. Here, she described the EU regulations that would be put into effect by July 1, 2012 insisting on more precise labeling of the places of origin for the olives and the sites of production if they are different from the origin of the olives. These sites must be registered with the EU certification

boards, with open accessibility to inspection being a pre-requisite for certification. In addition to FFA, labels would also have to include peroxide content, wax content, and a spectroscopic analysis for unsaturation. Everything must be certified and approved and inspected if the oil was to be accepted for export to the high-end markets of the US and Europe. The audience in Foça was full of both long time grove owners and newcomers to the olive business like Hakan. The moment the floor was open to questions, the farmers and producers registered their disapproval. These increasingly elaborate rules, they felt, were designed to keep Turkish olive oil outside of world markets. The speaker told the audience that China was rapidly becoming a consumer of olive oil, and that India was getting Israeli help to develop their own olive oil industry. Our sense was that the local growers felt as though their ownership of the olive was being challenged. Dr. Brown Keyder pointed out that much of the tighter EU regulations were driven by the marketing strategies of high-end boutique producers in the United States. A blog post entry in Foça the next day provocatively asked, “Will America become the new homeland of olives?”

This debate between the high culture of haute cuisine and authenticity of natural tastes served us well in our interdisciplinary discussion of place and space. Here was a moment that we as a learning group saw a complex interplay between the locally transmitted olive oil palate, and a community struggling with a decision whether they would trade in that authenticity to compete in a global marketplace.

We were particularly struck by the competing discourses about olive oil taste. While boutique olive oil producers draw on knowledge of chemistry and techno-science to support their claims for a superior palate, “Derler ki...” (they say) is used by locals to authorize statements about why the taste of the locally consumed olive oil is superior to the boutique olive oils which gain their marketing value through the visibility of their acid content in marketing. For the

learning group, this was an invaluable opportunity to bring together our disciplines (law, folklore and anthropology, chemistry).

Revered “Place” for Foçaians: Participants in the workshop in year 2 interviewed residents, asking them to identify a single thing, or place they would miss most if they left Yeni Foça. After telling us that first of all, they wouldn't leave, old timers and young adults went on to almost unilaterally say that they would miss the air. This took us by surprise. We had expected them to talk about the glorious coast, the sunset bays, a local meeting spot or boyhood home: a physical location upon which you could stand or remember or touch. Instead, young and old set their connection with this place on the air. It was described as clear and clean, as constant and keeping the heat at bay. Certainly it is a ubiquitous force to be reckoned with. It moaned its way through half opened windows of our classroom, ruffling papers and blowing them off tables if we were careless. Outside, it rattled the blades of the palm trees and whistled around the rock cliffs along the shore. On particularly windy days, it blew white tips onto the crests of the waves, causing the surf to splash up over the retaining walls that line the harbor. Indeed one of the many off shore islands is reported to be an inspiration for the island of the Sirens in Odysseus' voyage where the winds moaning through the cliffs were crafted by Homer's imagination into irresistible songs from supernatural women (likely seals) determined to draw sailors to their deaths on nearby rocks.

When the new immigrants to Yeni Foca arrived in the 1920s, several windmills faced the sea as shown in Figure 2. The mills fell into disuse and one by one they were dismantled. Today, the only remnants of the windmills are found in the old photos of the harbor and as souvenirs in the tourist shops that line the modern harbor.

Today, the descendants of these immigrants have a relationship with the wind that is respectful and even reverential. We were told that tourists could be identified because they sit facing the sea with the wind in their faces, while Foçaians sat with the wind at their backs. Without the wind, the hot dry summers become unbearable. Though located along the sea, many of the locals do not swim, and they certainly do not bathe like tourists in the surf in plain view. Locals know small isolated bays and coves where they might swim if they choose at sunset, when the day is done, out of the public eye. Mostly however, they move to the shade, and capture the breezes as they can.

I got so interested in this olive oil and law topic (many thanks to you and your colleagues) that I have decided to write a book on it.

**Prof. Virginia Brown Keyder,
Public Speaker 2012**

Concern was raised about how development of a geothermal plant might take away the clean clear air that the Foçaians so revere. These emic descriptions of Yeni Foça's geography were an important means by which we accessed local subjective maps. These are not perceptions that can be expressed or elicited through quantitative instruments but rather obtained through ethnographic interviewing.

From a scientific perspective, however, their answers make sense. Air, like a rock, is matter composed of atoms and molecules. It is distinguished from a solid rock by the capacity it has as a mixture of gases to expand to fill up space, and by the constant random motion of its particles. The atoms and molecules that make it up have as much permanence as the atoms and molecules that make up the boyhood home or the waters of the harbor. A key difference is the lack of spatial organization, and the lack of any human control over it. Perhaps it is just this transience,

this constant random, indeterminate motion that the Foçaians respect, revere, and perhaps, as children of displaced people, even identify with.

Conclusions

Multidisciplinary scholarly teaching was a means of development for all of the participants in the workshop. Observation *must* be coupled with frequent and shared reflections for true learning to occur (Knight-McKenna et al, 2011). An ethnographer discovered another way of thinking: seeing the world through numbers and molecules. Meanwhile, the scientists recognized that students were often too willing to cede the powers of their own thinking to the expert status of their science professors. The facilitators worked hard to get the group to question, explore and take ownership of the synthesized knowledge. They were inspired about possible research collaborations and were rejuvenated about teaching to students who were enthusiastic about learning in the absence of pressure for getting the “right answer” for high grades.

Ege’de Atölye, a new nonprofit organization that is not affiliated with any single university but works collaboratively with several domestic and international institutions, organized the informal educational program. Intercultural experiences are encouraged as an exercise to understand invisible cultural differences between western and eastern cultures. Innovative interdisciplinary and scholarly learning is complementary to the Turkish higher education system that is stretching its resources to provide fair and equitable solutions for access to the programs that lead to high demand diplomas.

Our experience of two years running the Zeytin (olive) workshop has provided us with several take home lessons that might be useful to others planning on creating problem-based

interdisciplinary modules. We have seen that using a question that is important to the community creates a supportive environment in which locals are eager to collaborate. A sense of urgency, as in our case the threat to the olive production from both development and global market regulations, made our inquiries even more welcome to the community and relevant to our students (Heffner, Gunst, & Beversluis, 2011). The local stories collected by the students provided a framework in which the measurements mattered. Our movement about the community was facilitated by the interest of the local government. We find that the most successful faculty are those who can cross not only the national cultural boundaries, but the disciplinary ones as well. Their conversation modeled for the students how interdisciplinary exchange yields understanding. Finally, we would recommend choosing a small village in which to work. This keeps the experience personal to both students and the community. But it is necessary to go in carefully and slowly, respecting the authority of the community and helping to create agency. In Yeni Foça, we became part of the family.

I can't wait to go to college. For the first time ever, I am excited to go to school to learn.

Albert Toledo 2011 Participant

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Learning and Instruction

Place and Space in Yeni Foça, Turkey: An Interdisciplinary Analysis of the Olive Culture in a Small Village

Dear Editor,

Thank you for your useful comments and suggestions on the language and structure of our manuscript. We have modified the manuscript accordingly, and detailed corrections are listed below point by point:

Comments:

1) Each point provided in 'Research highlights' should be represented by bullets and should not exceed a maximum of 85 characters including spaces.

Research highlights have been revised and they no longer exceed a maximum of 85 characters including spaces.

2) Before online submission, please preview the PDF generated in the system to make sure that the manuscript is correctly generated.

PDF have been previewed before online submission.

3) Provide the tel./fax numbers (with country and area code) of the corresponding author.

Telephone and fax numbers of the corresponding author has been provided.

4) Pages should be numbered consecutively.

All pages have been numbered consecutively.

The manuscript has been resubmitted to your journal. We look forward to your positive response.

Sincerely,

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