

June 17, 2011

**A DEEP APPROACH® TO TURKISH**  
**SUGGESTION CARD FOR SELF-DIRECTED LEARNING**

**CARD NUMBER: 8**

**THEME: ARCHAEOLOGY AND SCIENCE**

**ARKEOLOJİ VE BİLİM**

LEVEL: Advanced

EDUCATIVE PROJECTS:

Project 1: Applying for a permit for filming a site

Project 2: Present how science helps decipher the past

Project 3: Role-play a tour guide and present a touristic site

*Module developed by Esra Alagöz  
and Isabelle Druc*



*Kerkenes News 12, 2009, fig. 11*

LANGUAGE STANDARDS BEING DEVELOPED (See ACTFL 5Cs Standards)

**Communication (1.1):** Engage in conversations about archaeology in Turkey, provide and obtain information, and exchange opinions.

**Communication (1.2):** Understand and interpret written and spoken language on a variety of topics related to archaeology and scientific research.

**Communication (1.3):** Present information about archaeology to an audience of listeners or readers.

**Cultures (2.1):** Demonstrate an understanding of the relationship between the practices of archaeology in Turkey and cultural perspectives in the country.

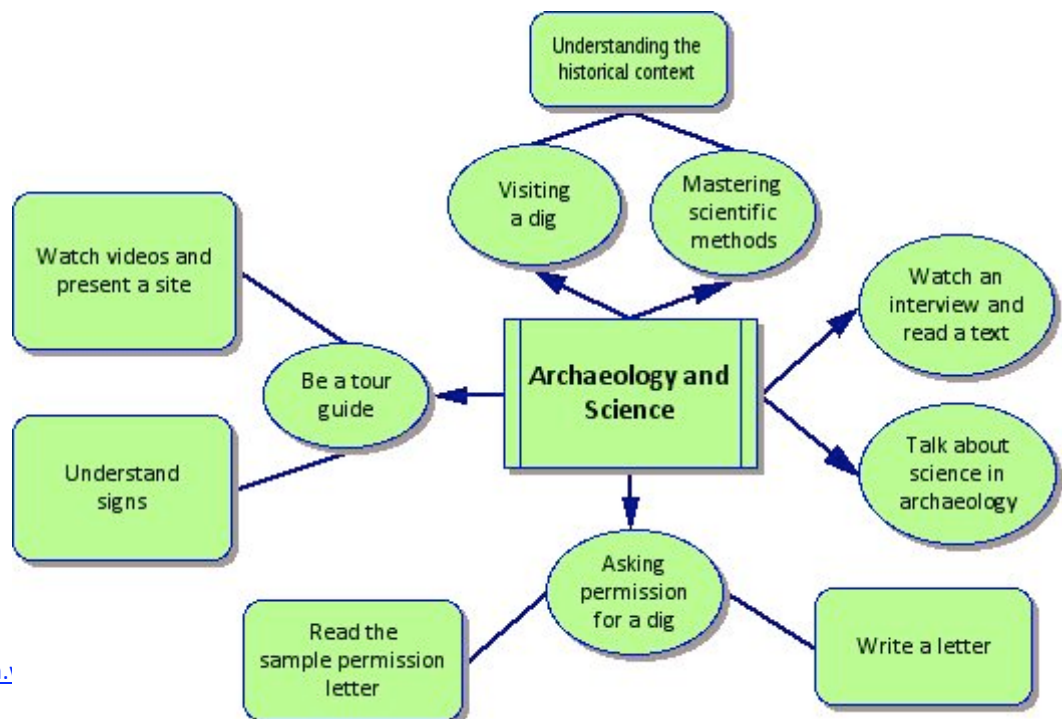
**Connections (3.1):** Reinforce and further your knowledge of science and archaeology through the Turkish language.

**Comparisons (4.2):** Demonstrate an understanding of the concept of culture through comparisons of the cultures studied and your own.

**Communities (5.1):** Share your knowledge of Turkish culture within and beyond your learning environment by talking about archaeology and archaeological sites in Turkey at your community library.

**Communities (5.2):** Show evidence of becoming a lifelong learner by using the language for personal enjoyment and enrichment.

**MIND MAP**



## MATERIALS USED IN THE MODULE

### Main videos:

Interview with Asuman Türkmenoğlu

Interview with Orkan Köyağasioğlu

Interview with Sevil Gülçür

Yazılıkaya

Çatal Höyük

Aizanai Hikayesi

Ephesus

### Additional videos:

Bergama

Text: “Metalurji ve Metallerin Kaynağı” by Joseph W. Lehner

Sample permission letter (See Appendix)

## 1) BAĞLAM/CONTEXT

Turkey has an extremely rich and long history, dating back thousands of years when the first organized towns were built, like Çatal Höyük founded in 7000 BC. Anatolia has been home or has been in relation with all the major civilizations that have shaped Western thought, philosophy, and culture. Take, for example, the story of King Midas, the Iliad, and the Trojan War; the conquests of Alexander the Great; the Persian, the Roman and Early Christians, the rise of Byzance; and the fall of Constantinople. In the Aegean region of Turkey, Thales de Milet, the famous mathematician and scientist correctly predicted a total solar eclipse in 580 BC; Peter the Apostle delivered his famous speech in the big amphitheatre of Ephesus (and was booed), and the sick and injured flocked to the world famous

medical centre in Pergamum (Bergama) and to the shrine of Asclepius, the god of medicine and healing. In this module, you will explore the past like an archaeologist and learn about the different sciences linked to understanding and resurrecting ancient cultures.

## MEKAN VE ZAMAN/SPACE AND TIME

The first known prehistoric cultures date back to more than 12,000 years in what is now Anatolia. Groups of hunters and gatherers, and later farmers, merchants, artisans, armies, established villages and cities ruled the land, made alliances, and spread advanced civilization. The map below gives you an idea of the location of some of the main cultures and archaeological sites in Anatolia, but there is much more to discover throughout history that shape what is now Turkey.

## 2) TEMATİK PROJELER/THEMATIC PROJECTS

Three projects are suggested for this module:

### **Project 1:** Bir belgesel hazırlama iznine başvurun - Applying for a permit for filming a site.

In Turkey, like in many other countries, excavations and investigations require authorizations and permits from the government and cultural agencies. Also, filming and taking photographs in public spaces for scientific or archaeological research or commercial (ads) or news documentaries require permission and a special visa from the Ministry of Culture and Tourism, and even sometimes from local directorates for filming in museums and historical sites (unless it is for tourism and personal use). In this project, you will learn how to write a letter requesting permission to film, you will need to read and fill out official documents accompanying your letter, present your request, and use the proper opening and closing terms and salutations. You will pose as a filmmaker, or archaeologist, and will need to describe your work and your intent (e.g., what you want to film).

To help you with this, there are two video interviews of archaeologists and a sample letter to request a video permit. The movies available for the other projects will give you additional context, if necessary, to write your request; invent a time frame for the study (i.e., the dates, duration, and materials to be used).

**Project 2: Bilimin gemiři aydınlatmaya nasıl yardımcı olduđunu anlatın - Present how science helps decipher the past.**

Science and scientific techniques are increasingly used to answer archaeological queries. In this project, you will watch one interview of an archaeometrician – in this case, a geologist working in archaeology -- and read one text about chemical analysis done on ancient metals. This material highlights how modern science is used in archaeology to understand the past. To discuss these issues, you will learn technical terms and names of cultures, materials, places, and time periods. You will also compare how science and archaeology intermingle in your country of origin.

**Project 3: Bir tur rehberi olun ve turistik bir yeri tanıtın - Role-play a tour guide and present a touristic site.**

When visiting an archaeological site, a museum, a cultural place, information panels often guide your way. You may also encounter restrictions and warnings clearly labelled. Do you understand them? Here are a few you should know: It is forbidden to take photographs, to enter this area, to smoke, to climb the rocks, to pick up ceramic fragments, to write on frescoes... It also might be requested to ask the custodian for an entry pass or, that a guide must accompany you. In this project, you will pose as a guide and present a site to a friend or classmates. Several video clips will give you ideas on how to lead a tour. How does a culture shape a society? Think about this while watching the videos in this module. How were the people living in the place you visit? What data have we gathered from the scientific investigation and what can we interpret from these data?

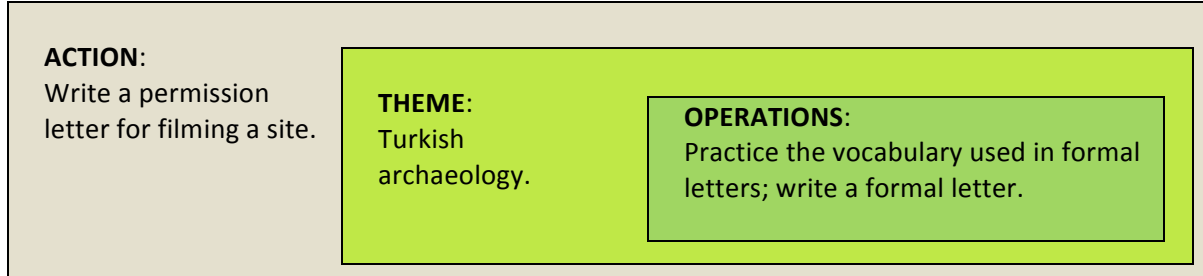


*Kerkenes News 12, 2009, fig. 10 - used with permission*

**PROJECT 1: BİR BELGESEL HAZIRLAMA İZİNİNE BAŞVURUN  
APPLYING FOR A PERMIT FOR FILMING A SITE**

**TABLE 1 INSTRUCTIONAL ORGANIZERS and EMBEDMENT MAP**

Applying For A Permit			
ACCESS		VOICE	
INTERPRET	ANALYZE	PRESENT	INTERACT
<b>READ/WATCH/LISTEN</b> Watch the interviews with Orkan Köyağasioğlu and Sevil Gülçür. Read and study the sample permission letters/forms.	<b>FOCUS ON LANGUAGE</b> Use the vocabulary and phrases proper to formal letters. Integrate postpositional phrases II	<b>WRITE/SPEAK/RECORD</b> Take notes about the past and present of archaeological studies in Turkey. Write a formal permission letter for studying or filming at the archaeological site.	<b>EXCHANGE AND ACT</b> Discuss the notes you took while watching the interviews. Give feedback to your group mate on her permission form.



**ÖNERİLER/GUIDELINES**

**A. Neler yapacağım?**

1. Orkan Köyağasioğlu ve Sevil Gülçür ile yapılan röportajları izleyiniz. Bu röportajlarda bahsedilen kazı ve su altı tarama çalışmaları hakkında bilgi edininiz. Videoları izlerken Türkiye'deki arkeolojik çalışmaların geçmişi ve bugünü hakkında notlar alınız.
2. İkişerli gruplar halinde izlediğiniz videoları ve aldığınız notları tartışınız.
3. Bireysel olarak videolarda anlatılan kazı veya araştırmalardan birini seçip onunla ilgili bir çalışma yapacağınızı varsayınız. Bu çalışmayı yapabilmeniz için gereken izin belgesini hazırlayınız. (Bakınız: Guidelines B)
4. Hazırladığınız izin belgesini grup arkadaşınızla paylaşip verilen değerlendirme ölçütlerine dayanarak geribildirimde bulununuz.

**B. Yapacağım çalışmanın izin belgesini nasıl hazırlayacağım?**

1. Örnek olarak verilen dilekçeleri (Appendix A, internet bağlantıları) inceleyiniz. Bilmediğiniz kelimeleri ve resmi hitap şekillerini araştırınız.
2. Yapacağınız çalışmanın detaylarını düşününüz. Çalışmayı nerede, ne zaman ve ne kadar süreyle yapacağınıza, yanınıza hangi malzemeleri alacağınıza karar veriniz.
3. Son olarak izin alacağınız kurumun tam adını ve adresini de ekleyip dilekçenize son şeklini veriniz.

### MATERIALS for Project 1:

There are two videos and a text for this project:

**First video (Interview with Orkan Köyasioğlu):** Orkan Köyasioğlu presents the site of Yenikapı where a tunnel under the Bosphorus is being built. He explains what his specialty is and what kinds of analyses are done.

**Second video (Interview with Sevil Gülcür):** Dr. Gülçür from the University of Istanbul speaks about the site she has been excavating for years in central Anatolia.

**Text:** Sample letter to request a video permit.

**Please also look at the permission forms available at the following website**

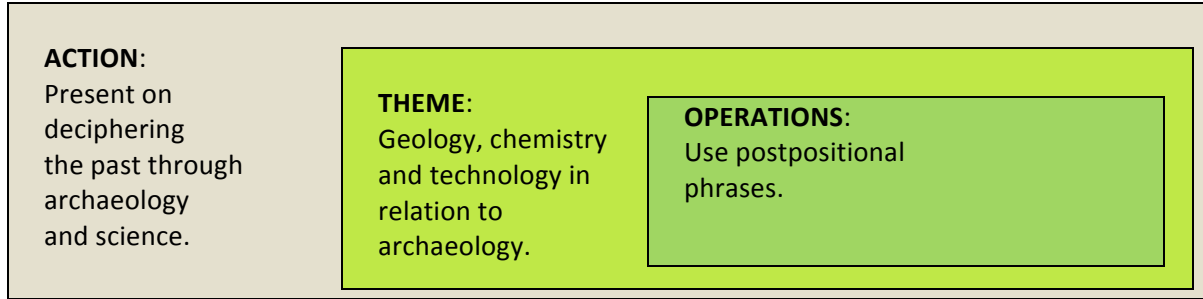
<http://www.gototurkey.co.uk/Filming-Permission.html>

## PROJECT 2: BİLİMİN GEÇMİŞİ AYDINLATMAYA NASIL YARDIMCI OLDUĞUNU ANLATIN PRESENT HOW SCIENCE HELPS DECIPHER THE PAST

TABLE 2 INSTRUCTIONAL ORGANIZERS and EMBEDMENT MAP

Decipher the Past			
ACCESS		VOICE	
INTERPRET	ANALYZE	PRESENT	INTERACT
<p><b>READ/WATCH /LISTEN</b></p> <p>Watch the interview with Dr. Asuman Türkmenoğlu.</p> <p>Read the short report by Joseph W. Lehner.</p>	<p><b>FOCUS ON LANGUAGE</b></p> <p>Integrate postpositional phrases I (-dan sonra, -dan itibaren...)</p> <p>Develop technical and field specific vocabulary.</p>	<p><b>WRITE/SPEAK/RECORD</b></p> <p>Take notes about the mutual influence between science and archaeology mentioned in the interview and the text.</p> <p>Make a list of elements that result from the collaboration of archaeology and science and how these elements are used to decipher the past.</p> <p>Make a presentation on how archaeology and science are used to decipher the past, using an example from your</p>	<p><b>EXCHANGE AND ACT</b></p> <p>Discuss the interview; compare your notes and your lists.</p> <p>Debate the contents of the presentation.</p>

		country of origin.	
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### ÖNERİLER/GUIDELINES:

#### A. Neler yapacağım?

1. Asuman Türkmenoğlu'yla yapılan röportajı izleyiniz. Kendi alanı olan Jeolojinin arkeolojik çalışmalara yaptığı katkıları not alınız.
2. Joseph Lehner'in kaleme aldığı "Metalurji ve Metallerin Kaynağı" adlı kısa raporu okuyunuz. Raporda anlatılan metalografik analizlerin arkeolojik buluntularla ilgili varsayımlara ne gibi katkılarda bulunduğunu not alınız.
3. Ülkenizde buna benzer yapılan bir arkeolojik çalışmadan örnekler vererek bilim ve arkeolojinin birbirleriyle etkileşiminin geçmişi anlamakta nasıl kullanıldığını anlatan bir liste hazırlayınız
4. Hazırladığınız listeyi görsel ve işitsel araçlarla destekleyip, sınıftaki arkadaşlarınızla paylaşınız.

#### MATERIALS for Project 2:

There are two videos and one article suggested for this project:

**First video:** Interview with Dr. Asuman Türkmenoğlu

**Second video:** Excerpt from the movie: *Çatal Höyük*.

**Text:** "Metalurji ve Metallerin Kaynağı" by Joseph W. Lehner. Translation from English to Turkish by Nilüfer Baturayoğlu Yöney. (The full English text can be found in Appendix B.)

**Summary of "Metalurji ve Metallerin Kaynağı":** In this short article, archaeologist Joseph Lehner describes the analysis he has conducted on metals found at Kerkenes, an Iron Age site in central Anatolia. The author is interested in learning where the metals come from (called *provenance analysis*). He is also interested in understanding ancient metal technologies and how the bronze objects were used.



## METALURJİ VE METALLERİN KAYNAĞI

*Joseph W. Lehner (translated by Nilüfer Baturayoğlu Yöney)*

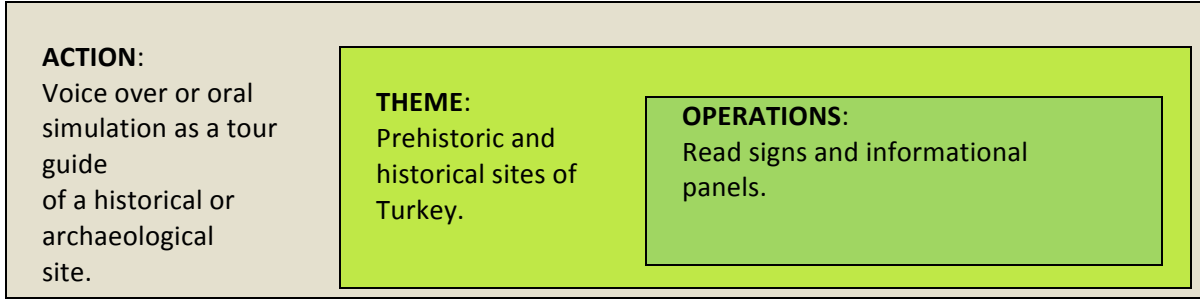
Metal teknolojisi ve kullanımı konusunda devam eden araştırmalar yeni ve şaşırtıcı sonuçlar ortaya çıkarmıştır. 2002 yılında Saray Yapı Grubu'nun Anıtsal Girişi'nde kazı sonucu bulunan, tunç levha- lardan kesilmiş şaha kalkmış bir çift yaban keçisi (ibex) üzerinde gerçekleştirilen metalografik analizler, bunların dış yüzeylerinin bir kalay tabakası ile kaplanmış olduğunu göstermiştir. Bir bezeme programının parçası olan bu keçi desenleri özgün kompozisyonda gümüş renginde görünmekte ve yapının anıtsal niteliğini destekleyen görsel görkemine katkıda bulunmaktaydı. Tunç objelerin bezeme amacıyla kaplanması Roma Döneminde uygulanmakla birlikte, bu teknik yeniliğin ne zaman ve nerede ortaya çıktığı bilinmemektedir. Bulunan bu objeler, Demir Çağında Orta Anadolu'da yaşayan uzman zanaatkarların metalürji konusundaki ustalık ve becerilerine ışık tutmaktadır.

Metal objelerin hammadde kaynakları konusundaki araştırmalar Demir Çağı ekonomik bağlantıları ve ticaret yollarının anlaşılmasına yardımcı olmaktadır. Bu yeni verilerin ışığında, Kerkenes Dağ'da yaşayanların Anadolu'nun farklı maden bölgelerindeki kaynaklara dolaylı olarak ulaşabildikleri anlaşılmaktadır. Ancak ön araştırmalar, Orta ve Doğu Toroslar'da yer alan güney kaynak bölgelerinin daha önemli olduğunu göstermektedir. Bu araştırma Kerkenes ve bölgedeki diğer sitelerde ortaya çıkarılan metal buluntularının analizleriyle sürdürülecektir.

### PROJECT 3: BİR TUR REHBERİ OLUN VE TURİSTİK BİR YERİ TANITIN ROLE-PLAY A TOUR GUIDE AND PRESENT A TOURISTIC SITE

TABLE 3 INSTRUCTIONAL ORGANIZERS and EMBEDMENT MAP

Visiting A Site With A Tour Guide			
ACCESS		VOICE	
INTERPRET	ANALYZE	PRESENT	INTERACT
<b>READ/WATCH/ LISTEN</b>  Read and study the signs and informational panels.  Watch one of the three videos that describe historical places.	<b>FOCUS ON LANGUAGE</b>  Understand signs and informational panels.  Take notes on the signs that are not listed in the appendix.  Use postpositional phrases II Boyunca Sırasında İçinde.	<b>WRITE/SPEAK/RECORD</b>  Jot down the historical, stylistic, and architectural characteristics of the sites described in the videos.  Write a script for the site, as if you were a tour guide for that site.  Do the voice over for a clip on a site.  Make sure your presentation aligns with the video. (Mute the sound.)	<b>EXCHANGE AND ACT</b>  Discuss the meanings of the signs in the Appendix C in groups of two.  Share the oral presentation of the site you will describe.



## ÖNERİLER/GUIDELINES:

### A. Neler yapacağım?

1. Arkeolojik çalışma yapılan bir alanı, müze veya tarihi ve kültürel alanları gezerken birçok tabela ve işaretle karşılaşacaksınız. Bu işaretlerin ne anlama geldiğini biliyor musunuz?
2. Ekte verilen (Appendix B) işaretleri inceleyiniz. Ne anlama geldiklerini ve her bir işaretin nerelerde karşınıza çıkacağını ikişerli gruplarda tartışınız. Bunlara benzer aklınıza gelen başka işaretler varsa onları da not alınız.
3. Önerilen üç videodan (names of the videos) birini seçip izleyiniz. Videoda anlatılan bölgelerin tarihi, fiziksel ve mimari özelliklerini not alınız.
4. Seçtiğiniz bölgeyi bir turist grubuna gezdireceğinizi düşününüz. Aldığınız notlardan ve yaptığınız araştırmalardan faydalanarak bölgenin önemli özelliklerini kendi yorumlarınızı da katarak anlatan bir metin hazırlayınız.
5. Hazırladığınız metne dayanarak sınıf arkadaşlarınıza o bölgenin bir sunumunu yapınız. Videoyu projeksiyon cihazıyla duvara yansıtarak anlatımınızın görüntülerle uyumlu olmasına dikkat ediniz.

### MATERIALS for Project 3:

There are four videos suggested for this project:

**First video:** "A Phrygian Yazılıkaya" as an example of a site presentation.

**Second video:** "Aizanai Hikayesi": this is a video introducing the archeological site Aizanai (Çavdarhisar). The site has Phrygian origins, but is mostly known for its Greek temple to Zeus and its Roman buildings.

**Third video:** Excerpt from "Çatal Höyük": Ian Hodder, a famous archaeologist is presenting the site of Çatal Höyük, describing how the people lived, their houses, how they cooked, etc.

**Fourth video:** Footage in Ephesus, an important Greek and, later, Roman site, where you see the different areas of the town (i.e., the library, the ancient villas of high-ranking people, the theater, etc.). You can use it for your presentation with a script and a background music of your own.

A few additional videos will give you an overview of other sites in Turkey.

### 3) İNTERNET BAĞLANTILARI/INTERNET LINKS

Turkey is blessed with an amazing amount of archaeological sites, many of which have Internet coverage, for tourism, researchers and the interested public in general. Here are just a few sites.

For permission forms to obtain filming/photographing permits:



<http://www.gototurkey.co.uk/Filming-Permission.html>

For some of the archaeological sites discussed in this module:

[www.catalhoyuk.com](http://www.catalhoyuk.com)

[www.kerkenes.metu.edu.tr](http://www.kerkenes.metu.edu.tr)

[www.turkeytravelplanner.com/go/Aegean/.../MidasSehri.html](http://www.turkeytravelplanner.com/go/Aegean/.../MidasSehri.html)

For a timeline for Ephesus [Timeline results for Ephesus Turkey](#)

For archaeometric research in Turkey:

[socarchsci.blogspot.com/2009/11/turkey-and-archaeometry.html](http://socarchsci.blogspot.com/2009/11/turkey-and-archaeometry.html)

#### 4) DEĞERLENDİRME/EVALUATION

##### Proje 1: İzin dilekçesi hazırlama

KRİTERLER	Geliştirmeli	Orta düzeyde	İyi	Çok iyi
Seçilen kelimelerin resmi belgelere uygunluğu				
Resmi belgelere özgü hitap cümlelerine yer verilmesi				
Mektubun dil bilgisi kurallarına uygunluğu				
Çalışmanın yeri, zamanı ve benzer diğer ayrıntıların belirtilmesi				
Dilekçedeki adres ve kurum adlarının doğru kullanılması				

##### Proje 2: Bilim ve Arkeoloji: Geçmişin aydınlığa çıkışı

KRİTERLER	Geliştirmeli	Orta düzeyde	İyi	Çok iyi
Bilim ve arkeolojinin kesişim noktaları yansıtılması				
Belirtilen bilimlerle ilgili yeterli bilgi aktarımı				
Sunumda anlatılan örneğin liste ile uyumlu olması				
Dil bilgisi kurallarına dikkat edilmesi				

##### Project 3: Bir kazı çalışmasından notlar

KRİTERLER	Geliştirmeli	Orta düzeyde	İyi	Çok iyi
İnternette alınan kaynakların özlü biçimde derlenmesi				
Sunumun bölgeyle ilgili ayrıntılı bilgiye dayanması				

Projede öğrenilen dilbilgisi kurallarının sunumda yansıtılması				
Arkeoloji ve tarihe has sözcüklerin kullanılması				
Dilin bilgisi kuralları ve tonlamaya dikkat edilmesi				
Sunumun içeriğiyle görsellerin uyumlu olması				
Anlatılan bilgenin kültürünün sunuma yansıtılması				

### 5) YARDIMCI TEMALAR/FOLLOW-UP

You can create a slide show of historical monuments, archaeological sites, traditional customs and handicrafts, or artisans at work to present at your community library and share this great information.

### 6) MÜZİK/MUSIC

To reach the music, go to the music link on the Module webpage or copy-paste the links below into your browser.

Different parts of Turkey have distinct music styles and musical traditions. The videos from the Mozaic program on Flash TV illustrate this point well, where music, culture, and tradition converge.

### 7) KAYNAKÇA/BIBLIOGRAPHY

There are many books and articles about archaeology and archaeological sites in Turkey, for different readerships. Art and tourist books are numerous, more detailed, scientific information is generally found in academic journals. See for example:

Hodder, I. (2005). *Çatalhöyük perspectives : reports from the 1995-99 seasons / by members of the Çatalhöyük teams*. London: British Institute at Ankara, Cambridge, UK: McDonald Institute for Archaeological Research.

Joukowsky, M., S. (1996). *Early Turkey: an introduction to the archaeology of Anatolia from prehistory through the Lydian period*. Dubuque, Iowa: Kendall/Hunt Pub. Co.

Koester, H. (Ed.). (1995). *Ephesos metropolis of Asia: an interdisciplinary approach to its archaeology, religion, and culture*. Valley Forge, Pa.: Trinity Press International.

Lehner, J. (2009) *Kerkenes News* 12, pp. 4-6.

Peterson, D. L., Popova, L. M., & Smith, A. T. (Eds.). (2006). *Beyond the steppe and the sown: proceedings of the 2002 University of Chicago Conference on Eurasian Archaeology*. Leiden ; Boston Brill.

Roosevelt, C. H. (2009). *The archaeology of Lydia, from Gyges to Alexander*. Cambridge, New York : Cambridge University Press.

### 8) SUNUMLAR/POWERPOINT PRESENTATIONS

Presentation I, **Science in archaeology**: This PowerPoint presents a few scientific techniques used in archaeology.

Presentation II, **Visit the past**: This PowerPoint presents some of the many archaeological sites of Turkey.

## 9) YARDIMCI KONUŞMA KALIPLARI/PRE-ORAL ACTIVITY SHEET

1. Arkeolojiye yardımcı olan bilim dalları / Sciences that help archaeology are....
2. ... olan kazı çalışmasını tercih ederim / I prefer archaeological sites that are .....
3. Bence bir kazı alanında çalışmak... / I think that working in an archaeological dig...
4. Bakır/demir Çağı / Bronze / Iron Age
5. ... sormak önemlidir, çünkü... / it is important to ask for ....., because...
6. Sınavı tekrar alman için dekanlığa bir dilekçe yazman gerekiyor / You need to write a (formal) letter to the dean in order to retake the exam.
7. Sometimes, when you are filling out forms in Turkey you may be asked to bring a copy of your residency form/id approved by notary's office. That is called: *noter tasdikli ikametgah belgesi/ nüfus cüzdanı sureti*

## EK/APPENDIX A

### SAMPLE PERMISSION LETTER

TÜRKİYE CUMHURİYETİ  
KÜLTÜR VE TURİZM BAKANLIĞI  
DANIŞMA VE DEĞERLENDİRME ŞUBESİNE

İSTANBUL

Ben Isabelle Druc, (Amerika, Kanada, İngiliz) asıllı fotoğraf sanatçısı/ film yapımcısıyım. Wisconsin Üniversitesi'nden aldığım fonla Temmuz 2011 ve Ağustos 2011 tarihleri arasında İstanbul Yenitepe arkeolojik sahasında eğitim amaçlı fotoğraf ve röportaj çekimi yapmak istiyorum. Araştırmam ... tarihinde başlayıp ... tarihinde sona erecek olup bir öğrencim de bana çalışmalarında yardımcı olacaktır. İzin başvurum için gerekli belgeler ektedir.

Gereğinin yapılmasını arz ederim.

ADRES

(başvuruyu yapanın adresi)  
Cumhuriyet caddesi  
Menekşe Sokak No:13  
Kadıköy/ İstanbul

26-Mayıs- 2010  
Isabelle Druc  
imza (signature)

Ekler:

1. Film çekimleri başvuru formu
2. Pasaport sureti
3. İkametgah belgesi

**EK/APPENDIX B**

Article taken from Kerkenes, News 12, 2009, pp. 4-6. Reproduced with permission by Geoffrey Summers, co-editor, [www.kerkenes.metu.edu.tr](http://www.kerkenes.metu.edu.tr). Go to the Kerkenes website to find photographs and more articles in relation to the excavations.

**METALLURGY AND THE PROVENANCE OF METALS**

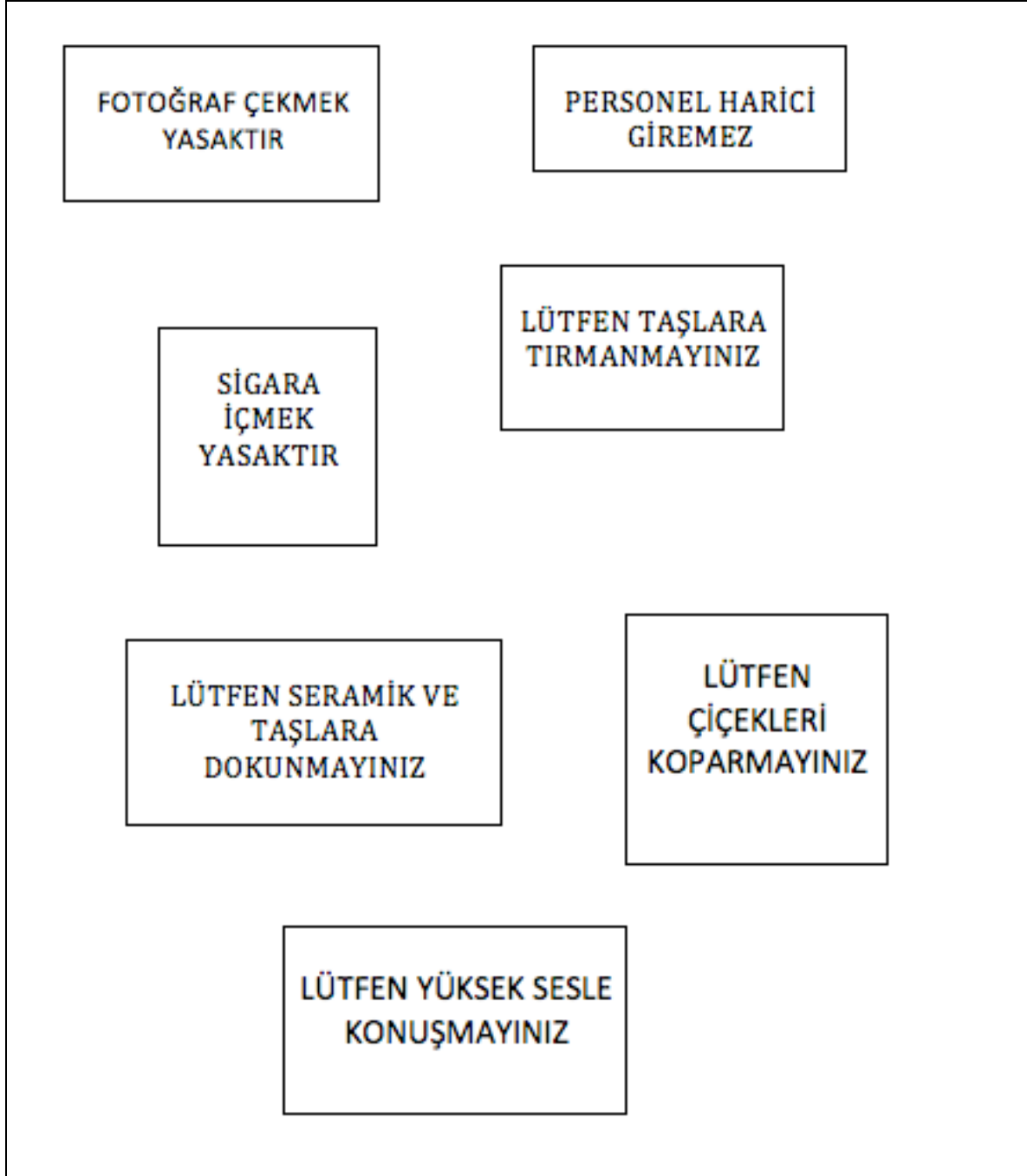
*Joseph W. Lehner*

Continuing research on the technology and consumption of metal yielded new and surprising discoveries. Metallographic analyses of the pair of large rampant ibex cut from sheet bronze, excavated in 2002 from the Monumental Entrance to the Palatial Complex, indicate that their outer facing surfaces were coated with a layer of tin. These ibex, which were elements of a decorative scheme, would have appeared silvery in color and certainly added to the visual spectacle that this monumental building was clearly meant to display. The practice of coating bronze objects for decoration was well known in Roman times; however, it is not clear when and where this technological innovation originated. These objects lend significant insight into the metallurgical mastery and versatility of craft specialists present in Central Anatolia during the Iron Age.

Research on the raw material provenance of the metal objects is beginning to shed light on the Iron Age economic trajectories. It is evident from these new data that the residents at Kerkenes Dağ had at least indirect access to a number of different mining regions throughout Anatolia. However, preliminary analyses suggest that source regions to the south in Central and Eastern Taurus may have been most important. This work will continue as part of a larger analysis of metal from Kerkenes and other sites in the region.

**EK/APPENDIX C**

**SIGNS AND INFORMATIONAL PANELS**



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