**STARTALK LEARNING PLAN Designing Learning Experiences**

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| **Date: July 30, 2019** |  | **Grade: HS/ Early College** |  | **Targeted Performance Level: ADV-Mid** |  | **Total Time for this Plan: Day 2** |
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**Lesson Title: Air Quality: From Bad to Worse**

**Lesson Essential Question(s):** *Can one reasonably dispute claims of experts that air quality issues continue to worsen in both developing and developed countries?*

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| **Curriculum Connection: Program Can-Do Statement & Performance Assessment Task** |
| Program Can-Do Statement: |  | Performance Assessment Task: |
| **INTERPERSONAL**I can take an active role in formal and informal face-toface or Skype discussions with STARTALK peers, peers in partner schools, instructors and experts on topics related to Environmental Challenges by using probing questions, providing explanations, supporting, reacting to and comparing opinions and preferences, and expressing advice and emotions.I can maintain spontaneous extended spoken or written conversations and discussions in Hindi/Urdu across various time frames using series of connected sentences and probing questions about targeted topics, issues experiences and events related to the theme of Environmental Challenges.**PRESENTATIONAL**I can deliver detailed and organized SPOKEN or WRITTEN presentations in Hindi/Urdu at the paragraph level and in various time frames based on information obtained from research and other sources on topics related to Environmental Challenges.I can advocate, present a point of view on issues related to Environmental Challenges taking into consideration cultural perspectives, and/or present SPOKEN or WRITTEN arguments with supporting evidence using organized paragraphs in various time frames. | **INTERPERSONAL PERFORMANCE ASSESSMENT TASKS:**Learners actively participate in face-to-face or Skype conversations on topics related to the theme of Environmental Challenges using information and perspectives obtained from Hindi/Urdu texts, classmates, partner school peers, and environmental experts as the context for discussion when engaging in interpersonal preSkype activities, Skype sessions, post –Skype debriefings and when completing Application of Learning tasks. They express their reactions (advice, opinions, emotions and preferences), make comparisons and provide evidence or explanations as warranted to justify assertions.Learners hold unrehearsed extended face-to-face or virtual spoken or written conversations on lesson topics related to the theme of environmental challenges using information acquired from a variety of culturally authentic sources. They interact with respect for cultural differences and converse with ease one-to-one and in small groups or teams to meet both social and academic needs during lesson specific pre-Skype activities, Skype sessions, post – Skype debriefings and to complete Application of Learning tasks.**PRESENTATIONAL PERFORMANCE ASSESSMENT TASKS**Learners provide coherent spoken or written explanations or descriptions of concrete and some abstract topics on the environment informed by facts and cultural perspectives obtained from a variety of culturally-authentic sources, peers and experts as required for completion of daily formative presentational tasks (e.g., multimedia projects, reflective blog posts, green city products).Learners present persuasive evidence-based positions on environmental topics and advocate for and justify solutions to environmental issues incorporating varying cultural perspectives. They present Ad Campaigns, Op Eds and other tasks to authentic audiences of listeners and viewers and take part in a debate on either the propositional or oppositional team addressing allowance of e-waste disposal in India and Pakistan. |

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| **Learning Episode #1: Pre-Skype Activities**  | **Number of minutes for this episode:** multiple 15-20 minute segments per episode |
| **Lesson Can-Do Statement**  | **Vocabulary** | **Check for Learning** |
| * I can share my opinion about the biggest environmental offender(s) expressed in my blog posting and react to comments made by peers.
* I can participate in a discussion leading to a group conclusion on *who is the biggest offender* based on classmate’s opinions.
* I can create questions for the Skype session with partner school peers based on video about the causes and impact of air pollution in India, Pakistan and the U.S.
 | Topical Vocabulary/language chunks related to this lesson episode may include, but are not limited to: * Environmental Challenges: Air pollution, water pollution (safe drinking water), land pollution, global warming, noise pollution
* Vocabulary used to express and support an opinionabout the most pressing environmental issue: *The biggest offender/violator/issue is*…  *(I think / consider / find / feel / believe…)* (*because of/given that/the reason is that…)*
 | * Teacher observations during exchanges regarding the biggest environmental offenders and creation of Skype questions- Look Fors include culturally appropriate verbal and non- verbal language, accuracy of content, vocabulary and language structures and evidence of critical thinking
* Questions created for Skype session based on video clip about air pollution
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| **Learning Experiences (are interactive and occur for the most part in pairs or in small groups)** |
| **LEARNERS:*** 1. Exchange opinions expressed in their blog postings about environmental offenders and react to comments made by peers. Develop a group conclusion on *who is the biggest offender* based on classmate’s opinions.
	2. Create questions for the Skype session with partner school peers based on video about the causes and impact of air pollution in India, Pakistan and the U.S.
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| **Materials Needed: NOTE: Lesson-specific resources containing all links to materials used, including instructional materials created by teachers, will be provided to site visitors and are available on the program website:** [**https://www.kean.edu/startalk**](https://www.kean.edu/startalk) **as a resource for STARTALK Programs** |
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| **Learning Episode #2: Skype Session**  | **Number of minutes for this episode:** multiple 15-20 minute segments per episode |
| **Lesson Can-Do Statement**  | **Vocabulary** | **Check for Learning** |
| * I can solicit the opinions of partner school peers about which infographics are the most informative for the public based on Rubric Guidelines.
* I can share and defend my point of view about the biggest environmental offender.
* I can exchange information with partner school peers based on video about the causes and impact of air pollution in India/Pakistan and the U.S.
 | Topical vocabulary/ language chunks related to this lesson episode, may include but are not limited to: * Vocabulary/language chunks used in Pre-Skype episode
* Causes of air pollution
* fuel adulteration, non-regulated vehicular and industrial emissions; traffic congestion, etc.
* cultural practices (e.g., cooking in homes with open fires or simple stoves not properly ventilated fueled by kerosene, biomass (wood, animal dung and crop waste) and coal; large scale crop residue burning in agriculture fields; morning trash fires in cities to keep warm in the winter; extensive use of firecrackers during Diwali festival)
* Impact of air pollution
* Decline in air quality shifting from “acute to chronic”, expecially in cities such as Delhi and Lahore
* Increade of non-communicable diseases in India/Pakistan as measured by their prevalence in various geographic regions that may be attributed to environmental conditions (e.g., Chronic obstructive pulmonary disease- COPD, heart disease and cancer), the prevention and cure of which is affected by cultural perspectives and practices
* Related vocabulary: reducing carbon footprint, smog, sulphur dioxide, ozone layer, global health emergency, long-term exposure, premature death, environmentally-friendly transportation
 | * Teacher observations during exchanges with partner school peers about infographics, environmental offenders and information in video clip- Look Fors include culturally appropriate verbal and non- verbal language, accuracy of content, vocabulary and language structures and evidence of critical thinking
* Points of view expressed and defended by students about environmental offenders
* Information recorded on graphic organizers from exchange with partner school peers about causes and effects of air pollution based on video clip
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| **Learning Experiences (are interactive and occur for the most part in pairs or in small groups)** |
| **LEARNERS:**1. Share info graphics with partner school peers and solicit their opinions about which are the most informative for the public based on Rubric Guidelines.
2. Exchange opinions about the biggest environmental offender and defend their point of view.
3. Exchange information with partner school peers based on video about the causes and impact of air pollution in India/Pakistan and the U.S. Note information obtained from on Fact and Perspectives Graphic Organizers.
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| **Materials Needed** |
| -Fact and Perspectives Graphic Organizers. |

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| **Learning Episode #3: Debriefing/Reflection/New Learning**  | **Number of minutes for this episode:** multiple 15-20 minute segments per episode |
| **Lesson Can-Do Statement**  | **Vocabulary** | **Check for Learning** |
| * I can compare viewpoints shared by partner school peers on environmental offenders with mine and those of my classmates.
* I can exchange information I obtained from partner school peers on the causes and impact of air pollution with classmates.
* I can examine indoor/outdoor cultural practices contributing to air pollution IN/PK and U.S.
* I can use the Air Quality Index (AQI) to compare air quality in IN/PK and U.S.
* I can explore an environmental history timeline (making note of influential cultural practices) to document the incremental increase in air pollution.
 | Topical vocabulary/ language chunks related to this lesson episode, may include but are not limited to: * Vocabulary/language chunks used in Pre-Skype and Skype episodes
* Vocabulary related to the Air Quality Index
* calculated for four major air pollutants: ground level ozone, particle pollution, carbon monoxide, and sulfur dioxide
* particulate matter- particle pollution levels

AQI values at or below 100 are thought of as satisfactory. When AQI values are above 100, air quality is considered to be unhealthyair quality ranges are symbolized by colorsthe legal limit for air pollution is … | * Teacher observations during exchanges with classmates about information obtained from partner school peers on environmental offenders and causes/impact of air pollution- Look Fors include culturally appropriate verbal and non- verbal language, accuracy of content, vocabulary and language structures and evidence of critical thinking
* New information recorded on Graphic Organizers comparing viewpoints about environmental offenders and causes and impact of air pollution
* Findings recorded on Graphic Organizers based on information found in the Air Quality Index, environmental history timelines and articles provided by teachers
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| **Learning Experiences (are interactive and occur for the most part in pairs or in small groups)** |
| **LEARNERS:**1. Compare viewpoints shared by partner school peers on environmental offenders with their own and note observations on Facts and Perspectives graphic Organizers.
2. Exchange information obtained from partner school peers on causes and impact of air pollution and add new information to Facts and Perspective Graphic Organizers.
3. Based on the **articles** read on air pollution and other informational texts provided by teachers, in pairs:
* Examine various indoor and outdoor contributors to air pollution (making note of the influential cultural practices) and determine the worst contributor to the problem in IN/PK and U.S.
* Use the Air Quality Index (AQI) to compare air quality in IN/PK and U.S.
* Explore an environmental history timeline (making note of influential cultural practices) to document the incremental increase in air pollution.
1. Record findings on Facts and Perspective Graphic Organizers
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| **Materials Needed** |
| **-**Facts and Perspectives Graphic Organizers-Academic Vocabulary for Extended Conversation found in Instructional Materials**Hindi:** -<https://khabar.ndtv.com/video/show/news/delhi-pollution-is-in-very-poor-category-502195>- Air Quality Index in and around Delhi-<https://app.cpcbccr.com/AQI_India/>- Article contains latest info about AQI, PM and time line of various pollutants for a particular state, city on respective map -<https://khabar.ndtv.com/video/show/news/parali-burning-in-uttar-pradesh-514219>- Crop burning in Uttar Pradesh-<https://navbharattimes.indiatimes.com/travel/travel-tips/if-you-have-plan-to-visit-any-where-you-can-check-respective-air-quality-index-by-steps/articleshow/68298950.cms>- Check AQ-<https://www.dw.com/hi/%E0%A4%89%E0%A4%A6%E0%A5%8D%E0%A4%AF%E0%A5%8B%E0%A4%97-%E0%A4%A8%E0%A4%B9%E0%A5%80%E0%A4%82-%E0%A4%B9%E0%A5%88%E0%A4%82-%E0%A4%AB%E0%A4%BF%E0%A4%B0-%E0%A4%AD%E0%A5%80-%E0%A4%AA%E0%A5%8D%E0%A4%B0%E0%A4%A6%E0%A5%82%E0%A4%B7%E0%A4%A3-%E0%A4%AE%E0%A5%87%E0%A4%82-%E0%A4%85%E0%A4%B5%E0%A5%8D%E0%A4%B5%E0%A4%B2-%E0%A4%95%E0%A5%88%E0%A4%B8%E0%A5%87-%E0%A4%B9%E0%A5%88%E0%A4%82-%E0%A4%AF%E0%A5%87-%E0%A4%B6%E0%A4%B9%E0%A4%B0/a-47580851> -Air pollution**Urdu:**-<https://www.youtube.com/watch?v=7_Ay5i30aFE>-24 News Channel - How smog is created - its impact - preventative measures -<https://www.youtube.com/watch?v=cSVp21IWIOk>- Fog in Lahore - Pollution or Climate Change?-<https://www.youtube.com/watch?v=2L5odks-7Rk>- Air pollution caused by traffic  -<https://www.youtube.com/watch?v=7MfvZCtaSj4>-Using air pollutants as ink  - Great way to use black smoke which would otherwise cause air pollution-[**https://www.youtube.com/watch?v=CO\_4RMLlft4**](https://www.youtube.com/watch?v=CO_4RMLlft4)-Brick making in Punjab - a cultural practice creating air pollution -with Urdu subtitles only  |

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| **Learning Episode #4: Transfer/Application of Learning**  | **Number of minutes for this episode:** multiple 15-20 minute segments per episode |
| **Lesson Can-Do Statement**  | **Vocabulary** | **Check for Learning** |
| * I can exchange information obtained in paired activity research to determine if air quality in IN/PK/US is getting worse and to what extent cultural practices are contributing factors.
* I can develop an **Ad Campaign** with a partner targeting a specific cultural practice contributing to air pollution to submit to the EPA in IN/ PK.
 | Topical vocabulary/ language chunks related to this lesson episode, may include but are not limited to: * Vocabulary/language chunks used in Pre-Skype and Skype and Debriefing/Reflection/New Learning episodes
 | * Teacher observations during exchanges with classmates about information obtained during paired activity research and during the development of the ad campaign- Look Fors include culturally appropriate verbal and non- verbal language, accuracy of content, vocabulary and language structures and evidence of critical thinking
* List of the cultural practices contributing to air pollution created as a result of paired activity research
* Draft of Ad Campaign content targeting a specific cultural issue
* Final Ad Campaign posted online
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| **Learning Experiences (are interactive and occur for the most part in pairs or in small groups)** |
| **LEARNERS:**1. Participate in vocabulary and literacy building activities \*Differentiation of Content- type of activity is dependent on learner proficiency level.
2. Exchange information obtained in paired activity research to determine if air quality in the three countries is getting worse and to what extent cultural practices are contributing factors. (During the exchange, a student or the teacher should make a list on the board of the cultural practices discussed to assist students in targeting one specific practice for their ad campaign).
3. Develop an **Ad Campaign** targeting a specific cultural practice contributing to air pollution to submit to the EPA in IN/ PK. Review exemplars provided and follow Ad Campaign Rubric Guidelines.
4. The ad should contain a photo(s) obtained online or drawn and a powerful written message or commentary of several sentences that meets rubric descriptors in the task rubric. (See examples provided by instructors) Ads will be uploaded to Linguafolio and posted online for partner school peer review.
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| **Materials Needed** |
| -Ad Campaign Examples-Ad Campaign Rubric Guidelines-Academic Vocabulary for Extended Conversation found in Instructional Materials |

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| **Learning Episode #5: Extended Learning**  | **Number of minutes for this episode:** learner self-paced |
| **Lesson Can-Do Statement**  | **Vocabulary** | **Check for Learning** |
| * I can interview my parents or a community to obtain their views about Clean Water Access and Water Pollution Issues in their home towns in IN/PK and comparing the water quality in their hometown, then and now.
* I can compose an entry in my reflective blog sharing my views about air quality in IN/PK/US and to what extent cultural practices are contributing factors.
 | * Topical Vocabulary/language chunks related to previous lesson episodes
* Vocabulary/language chunks in Reflective Blog Word Bank
 | * Interview responses noted on Graphic Organizers presented in lesson 3
* Reflective Blog posting
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| **Learning Experiences (taking place after the instructional day)** |
| **LEARNERS:**1. **Interview** parents or a community member (using interview questions provided) to obtain their views about Clean Water Access and Water Pollution Issues in their home towns in IN/PK and comparing the water quality in their hometown, then and now. Make note of responses on graphic organizers.
2. Compose an entry in their **reflective blog** sharing their views about air quality in the three countries and to what extent cultural practices are contributing factors. Use the Reflective Blog Word Bank and Reflective Blog Rubric guidelines.
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| **Materials Needed** |
| -Parent Interview Questions-Facts and Perspectives Graphic Organizer-Reflective Blog Word Bank-Reflective Blog Rubric Guidelines |

**Post-Lesson Reflection**

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| **Teachers will engage in the *cycle of reflective teaching* at the end of each instructional day and will consider:** What were the strengths of the lesson? Which activities helped to maximize the learning? Did all learners meet the goals of the lesson? Why or why not? What could you do to improve this learning plan if you address these lesson can-do statements again? |