

# Overcoming Challenges: A Collaborative Project Exploring Climate Migration by Lynne Wiesecke, 2021 CTI Fellow Albemarle Road Elementary School

This curriculum unit is recommended for: Students in grades 1-5

**Keywords:** Challenge, Habits of Character, Environment, Natural Disasters, Migration

**Teaching Standards**: See <u>Appendix 1</u> for teaching standards addressed in this unit.

### **Synopsis**

Climate change is our reality. Around the world, the severity of natural disasters is being experienced on an unimaginable scale, causing widespread displacement of people. Around the world, impoverished peoples are most directly affected by climate change. Fragile populations, who have little to no ability to "bounce back" and recover from natural disasters when they occur, often inhabit the areas at most risk for extreme damage. This inability to rally and rebuild after a disaster is one of the main push factors for climate migration. The choice to seek a new life elsewhere is not a wish but more an essential need.

Many students in our schools have directly overcome difficult migration journeys and others have close family members who had to overcome such experiences. Whether these challenges are due to climate change, environmental damage, political strife, violence, economic collapse, or conversely a complex combination of all these issues, they all have certain habits of character, such as perseverance, collaboration, initiative, responsibility, integrity and empathy in common. This curriculum unit helps students review and embody positive habits of character as well as learn strategies and behaviors that help to overcome challenges at all levels.

This unit begins with an overview of how climatic and environmental conditions can push families to migrate. A shared reading experience is followed by a story of how a fictionalized character overcomes challenges and survives changing environmental conditions. Students use a digital mind map to visually illustrate how we overcome difficulties. Students are encouraged to explore their own challenges or their family's migration history. It is our ability to meet and survive these challenges that makes us strong and resilient.

I plan to teach this unit during the coming year to 25 students in English Language Pullout Services.

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### Introduction

This unit seeks, through teacher and peer supported instruction alongside technology integration, to allow students to learn about how climate and environmental change drive migration. Students will explore essential ideas via teacher created resources in Book Creator®. Students will organize, make connections and present their thinking and experiences using a mind mapping app called Popplet®. Through this combination of shared reading, writing and digital instruction students of any age will have a better understanding of global and community concerns facing our earth. This unit promotes positive habits of character as well as environmental stewardship in young students, grades 1-2. Additionally these activities will grow self-awareness, cultural pride and personal confidence. This unit is designed for small or whole group instruction and provides heavy language scaffolding through visual imaging, physical manipulatives, and teacher modeling. Lessons are further supported through concrete examples, modeling, picture stories, sentence frames, graphic organizers, iPad technology and interactive language applications such as Book Creator®, Popplet®, Nearpod®, Green Screen® and Timeline Creator® This unit is designed for students with an immigrant background, but can be easily adapted to use with all students. It is easiest to implement in a small group setting, however it can be modified for whole class usage or for instruction with older students.

Through hands-on and technology based interactive language projects and activities students will explore how we are affected by climate change and how our everyday actions have dire consequences both now and in the future. Students explore how people, their community and weather around the world are interconnected through our dependence on Earth's environmental health. Teacher directed projects involve read-along stories, visual presentations, interactive technology based tasks and personal discussion opportunities which help students to visualize and verbalize globalization, climate changes, natural disasters and migration push factors in a low anxiety, safe and child friendly manner. It is expected that through this experiential approach to literature and character study, children will more fully empathize, and associate themselves with the main characters and/or their own unique family migration history. Thus, students come to personalize learning in such a way that it will forever remain in their memories and foster a positive change in behavior.

At our school, oral language and writing skills seem to lag behind listening and reading skills due to a lack of opportunity. So, in creating this lesson unit, I specifically sought to provide students a stage on which to verbally express their thoughts, desires and responses to new ideas. Additionally, I provide them visual hooks and sentence frames to support narrative writing tasks. In doing so, I provide them with much needed practice in academic speaking and writing, i.e. using linguistically complex and content specific language and structures in a respectful and collaborative manner.

An optional peer collaboration component steps the learning up another notch and allows for students in 5th grade, who are learning about human rights as well as the effects of natural disasters, to share what they know and thus build confidence, proficiency, relationships and understanding. Peer collaboration, either done in person or virtually via FlipGrid, allows the

teacher to further expand the basic first and second grade level content of overcoming challenges and good habits of character towards the larger and academically more intense concepts of immigration, human rights, environmental stewardship and climate change. This curriculum unit provides ESL, Elementary Ed and Special Education teachers the opportunity to support, teach and model, write and speak about grade level content in an un-intimidating, engaging manner. Furthermore, students with an immigration background are able to share and work through their family's struggles and journey in a supportive and culturally sensitive manner.

### Rationale

This curriculum unit is needed because there is a lack of understanding of how poverty is linked to and can be affected by environmental conditions, climate change, racial policies and the global exploitations of wealthy nations. The Charlotte Teachers' Institute Seminar, Climate Refugee Stories, has clearly illustrated the importance of teaching about global warming and climate change. In addition, this seminar shared the factors driving climate migration and the tremendous burden and cost on already marginalized communities. We've learned how complex and complicated migration is. Through studying different points of view, we've explored how closely entwined economics, weather and environmental stability and health are. The infamous legacy of pollution, industrialization, colonization, religion racial stereotypes, world politics and class hierarchy on fragile populations became real as we heard first hand stories of communities affected by climate change.

As a society, I feel that we are still coming to terms with our role as steward of the Earth and our role in protecting the environment so that the climate can stabilize. It is a bitter pill to swallow, however it has become increasingly easy to see how our actions, personally and as a nation, affect not only all of us, but due to the global nature of weather patterns, people all over the world. Families and people with the least amount of privilege and cultural capital are most dramatically affected by natural disasters that cause drought, flooding and destruction of property. When people lose their homes, their livelihoods, and/or their food source they lose their sense of safety and without a strong social net, they lose their ability to even survive. Climate refugees often have little support and little hope of receiving legal immigration status in the United States, however their prospects in their home countries are often so dire that they would rather chase after a miniscule hope, rather than face a definite hopelessness. Systemic and institutionalized racism against those with dark skin further complicates and defines the actions of those in power. During this time of pandemic, economic difficulty and global conflict the need for tolerance and compassion needs to start with our youngest learners, from the bottom up, for they are the future and it is our responsibility to help them grow up in a more sustainable and fairly balanced world, socially and environmentally.

When families are forced to flee unsustainable living conditions, their children are in essence involuntary participants in their families' trials. When a family chooses to move, children are usually reluctant migrants, as no one asks them what they would rather do. More often than not, they are simply 'baggage' that families schlep along with them as they flee dire

and difficult situations. Young children aren't always able to easily make the connections between a hurricane, mom crying, suddenly being homeless, and the resultant trek across multiple states or countries and even possible incarceration at the U.S. border.

Research by Sarah Jaquette Ray has shown that when children do not understand the why and how of a situation and have no ability to control the future, they struggle with severe feelings of anxiety, fear and dread. I propose that by exploring climate, environment in addition to human migration stories in an age sensitive manner, children will be better able to process and accept the movement of their families as a normal experience. The opportunity to interact with age-appropriate digital books and create interactive, and visually enhanced timelines or bubble maps using interactive and engaging iPad applications will help young students better understand cause and effect as well as understand how climate and migration events can be connected. Additionally, the activities in this curriculum plan help children see that they are not alone in their personal experiences and that habits of character such as initiative, perseverance, and collaboration can help to overcome personal hurdles and difficulties. Furthermore, participants will develop empathy and respect for those forced to make such migrations as well as respect and concern for the environmental changes that drive migration. This project will help students better understand themselves, their world and possibly their own families' journey.

A key rationale for incorporating a personal response to this selection of literature is to allow not only a greater retention of the story and the attached lesson but also to provide affirmation and connection, especially for some of our most recent immigrants who are fleeing environmental disasters in Central America, South East Asia and Africa. Furthermore, this unit allows English Learners greater opportunity to practice and develop content specific oral and written language in a safe and structured manner. Drawing, sharing and sequencing for younger students, is a natural and un-intimidating manner to express understanding of new content and language. Learning to discuss differences in opinion and beliefs in a respectful manner is especially crucial for students who are fleeing a culture of bigotry and intolerance and/or those who may be facing racial and ethnic intolerance in their new country.

Students growing up in the 21<sup>st</sup> century do not have the luxury of ignoring climate change. The planet they will inherit is based on the actions and decisions made today. Additionally, as this CTI seminar has illustrated, racial, linguistic, religious and geographic bigotry as well as entitlement and exclusion are an integral part of our society and must be explicitly combatted alongside pollution and environmental destruction. A history of ignoring or feeling powerless to change the push factors that cause migration to the United States needs to change. The dichotomy of favored versus unfavored groups of people affects not only economic opportunity but also affects self worth and self identity. Economics and national development go hand in hand with climate stability. An area with no secure and clean water source cannot thrive, thus its people are forced to migrate. Mudslides, Hurricanes and Drought cause indiscriminate suffering. Even the youngest students need to recognize that climate change has affected weather conditions which in turn has affected the severity of weather events which cause drought,

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<sup>&</sup>lt;sup>1</sup> Sarah Jaquette Ray, *A Field Guide to Climate Anxiety: How to Keep Your Cool on a Warming Planet*, 1st ed. University of California Press, 2020, doi:10.2307/j.ctvw1d67m.

flooding, mudslides, crop failure and wind damage. These events force people from their homes.

Hahn's research and my own experience has shown that children easily connect to and naturally form comparisons when listening to stories, especially if the stories incorporate children and families similar to their own.<sup>2</sup> Migration is a scary concept and a difficult journey. Migration is also the survival of the human spirit and a beautiful example of overcoming tremendous hurdles. It is in this light that the unit intends to present and explore climate migration. Students will use a teacher created picture book to form a baseline understanding of climate change and migration. Then, using a fictional (teacher created) character as a model, and under direct teacher instruction, students will discuss the character's actions, feelings and habits of character. Following this, students will use computer applications to complete a digital bubble map or timeline that illustrates and draws connections between the events and factors prominent in the migration journey of their fictional character. During the concluding activity of this "shared" instruction, students upload their mind map and orally describe the character's migration story onto a digital sharing platform. After completing this whole group process, students can be invited to individually illustrate and describe their own migration journey, if applicable. Students may alternatively select a second fictional character in order to complete the process independently.

While all students benefit from learning positive habits of character, students from marginalized and persecuted communities benefit directly from the message that through personal responsibility, collaboration, perseverance, initiative and effort, they can overcome challenges. Visually illustrating and celebrating the migration story of their own families affirms their journey, their culture, their language, their beliefs, and their identity as an overcomer and a fighter. This affirmation is especially important for students who are fleeing ethnic, religious or gang violence and conflict in their countries of origin. Students fleeing traumatic events such as hurricanes, droughts or mudslides are especially vulnerable to long term psychological and developmental concerns, so topics to address social and emotional health are relevant and required.

# **Key Goals and Objectives**

Student's initial interest and "I want to know questions" for the unit will be inspired by a shared reading of age appropriate texts. The primary text will be a teacher created picture book, linked below. Further exploration and connections can be made through and might include the below listed children's literature on global warming and climate change. In addition, students can benefit from visual presentations created by older peers using Adobe Spark® and/or partake in real/virtual field trips.

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<sup>&</sup>lt;sup>2</sup> Hahn, Mary Lee Hahn. *Reconsidering Read Aloud: A Time for Teaching and Learning*. Portland, ME: Stenhouse Publishers, 2002.

### **Profile**

The setting for this unit is a crowded, Title I, K through 5<sup>th</sup> Grade elementary school. This school and neighborhood were originally predominantly middle class Caucasian with a sizable minority population of African American students just a decade ago. It has evolved in the past decade to hold a majority minority population, primarily Hispanic and African American. There is currently tremendous linguistic and ethnic diversity in the population, as the surrounding areas have become a hub for newly arrived immigrants. The school currently consists of almost 800 students. Title I means that a large percentage of the children attending this school live in families with incomes that are below the federal poverty line.

More than one-half of the children at this school are minority language speakers, and a good two third of these children are still limited in their English proficiency, with a higher percentage and the greatest numbers of lower proficiency English language speakers in the primary grades. In grades K-2 most classrooms have a majority population of scholars who are beginning English language learners. The most populous language is Spanish, but as the area surrounding the school is also a hub for refugee relocation from strife-affected areas in Africa, South East Asia, the Middle East and Central America, there is tremendous ethnic and linguistic diversity, with the most current refugee resettlement coming from Central America, Myanmar and the Middle East. Many of these students are fleeing natural disasters, civil unrest and economic collapse. They understand firsthand the dire consequences of climate change for those who live in de-forested mountains, coastal wetlands and arid plains. The inclusion of students and families from around the globe really makes the unit come alive and supports the appropriateness and relevance of such a topic. While this unit is planned specifically for younger English Learners, it can easily be modified for older learners and native English speakers. FlipGrid® also supports a "Global Pals" component that allows for schools to interact directly with schools around the world. The key concepts of environmental stewardship, community awareness, overcoming challenges and positive habits or character are beneficial for everyone.

### **Content Research**

Students of all ages are aware of their physical environment. They pick up on news and weather reports that they may hear or see at home. English Learners especially, may be cognizant of immigration conflicts and policies. Failure to talk with children about complex matters such as extreme weather, immigration and human rights does not shelter them from these topics, in reverse ignorance or only partial understanding can lead to increased fear and anxiety.

Rousell et. al in A Systematic Review of Climate Change Education: Giving Children and Young People a 'Voice' and a 'Hand' in Redressing Climate Change, speaks to the idea that children today are very much aware of climate change and require an outlet to express their concerns and ideas. They report that children benefit from an interdisciplinary, creative and affect driven approach to climate change education. They report that we can not afford to delay instruction in climate change due to the fact that "Children and young people are growing up in uncertain and precarious times, as the social, cultural, and environmental effects of global

Children are naturally eager to engage with each other, with teachers and with parents on a variety of topics. Gail Tompkins et. All in *Sharing the Pen*, illustrates how even young children enjoy and are able to participate in shared writing activities.<sup>4</sup> Furthermore, Mary Lee Hahn in "Reconsidering Read-aloud" points out that shared collaborative reading fosters comprehension, class cohesion and greater awareness of language and literacy features.<sup>5</sup> Thus, I feel that exploring the idea of climate change through a frame of shared reading and writing is a valid and exemplary method to bring this content to first graders.

More than a decade ago, Laura Brazzo researched children's drawings about the environment in Mexico and in England. She discovered that not only was drawing an age appropriate and valuable way of exploring a child's thoughts on such a topic, but that students from diverse cultures and languages were universally concerned and pessimistic about the condition of our Earth. There was not much difference in their perception of the difficulties facing us.<sup>6</sup> Climate change is a reality that will affect future generations in an exponentially increased manner. Our greatest hope to affect real change may lie with our youngest learners and not the old guard in the political establishment. Furthermore in affecting and reducing climate change and the frequency of severe weather we can possibly affect the occurrence of mass exoduses and migrations of large groups of people.

Immigration and migration are complex issues that are an integral part of my student's lives. Tom Green, an author I studied in a previous CTI seminar wrote about Muslim American youth and their need for belonging, self identity and self determination. I can extrapolate that this need to belong and a need for identity is universal to all minority populations. Green's research links the importance of belonging and self awareness to future emotional health. A child who doesn't know or understand why and how his family relocated to the United States is missing a chunk of his familial legacy and thus may feel rootless. Children with such gaps are limited in their ability to accept and celebrate themselves as members of a specific group. They may see their personal history and heritage as a liability instead of something of value. These same students are also more likely to accept and internalize negative stereotypes and racial slings

<sup>&</sup>lt;sup>3</sup> David Rousell and Amy Cutter-Mackenzie-Knowles. "A Systematic Review of Climate Change Education: Giving Children and Young People a 'Voice' and a 'Hand' in Redressing Climate Change." *Children's Geographies* vol. 18, no. 2, (Routledge, 2020): 191–208, doi:10.1080/14733285.2019.1614532.

<sup>&</sup>lt;sup>4</sup> Gail E. Tompkins, and Stephanie Collom. *Sharing the Pen: Interactive Writing with Young Children*. Pearson/Merrill/Prentice Hall, 2004.

<sup>&</sup>lt;sup>5</sup> Hahn, Reconsidering Read Aloud.

<sup>&</sup>lt;sup>6</sup> Laura Barraza. "Children's Drawings About the Environment." *Environmental Education Research*, vol. 5, no. 1 (Taylor & Francis Group, 1999): 49–66, doi:10.1080/1350462990050103.

towards themselves.<sup>7</sup> Medical experts such as Crowley, in her essay titled "The mental health needs of refugee children: a review of literature and implications for nurse practitioners" discusses mental health needs of refugees. She reiterates that a primary need for a healthy individual is in a strong development of self. This author along with other experts in the field, expresses the idea that a sense of self and a sense of value are intrinsically linked to understanding who you are, where you came from and what is important to you. Generally speaking, we value what we know and understand.<sup>8</sup>

Hanna and Paulina, who studied children's reactions to climate change in developing countries, speak to the fact that children, like adults, can not value the environment and their role in protecting/changing it if they do not understand it. "Science education is, in itself, a powerful societal factor which can affect climate change attitudes and behaviour at the cultural level. Climate change then has the potential to both transform and elevate the status of science education more broadly, as a discipline which has both ethical and political implications." Habits and behaviors just like food preferences are usually learned behaviors. Behaviors such as recycling, conservation and controlling pollution and trash often do not exist in areas where economic and physical survival take first priority. Therefore it is even more crucial to implement direct and explicit instruction in the primary grades. This instruction is essential to greater understanding and development of preventive action against climate change further down the line.

Furthermore, as Boyes and Martin<sup>10</sup> describe, students may not have a correct or realistic sense of what climate change is and how or why the earth's temperature is increasing. Ignorance, for young people and adults, can be dangerous on many levels and is more easily corrected before it has become cemented.

Vocabulary instruction is essential for English learners. Language experts such as Isabel Beck et al, report that one of the best ways to present new vocabulary is to embed it in literature that is relevant to the learner. 11 My own experience as a teacher supports this idea that child

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<sup>&</sup>lt;sup>7</sup> Todd H. Green. *The Fear of Islam: An Introduction to Islamophobia in the West*. Minneapolis: Fortress Press, 2019.

<sup>&</sup>lt;sup>8</sup> Caitlin Crowley, "The Mental Health Needs of Refugee Children: A Review of Literature and Implications for Nurse Practitioners." *Journal of the American Academy of Nurse Practitioners*, vol. 21, no. 6 (Blackwell Publishing Ltd, 2009), 322–31, doi:10.1111/j.1745-7599.2009.00413.x.

<sup>&</sup>lt;sup>9</sup> Rema Hanna and Paulina Oliva. "Implications of Climate Change for Children in Developing Countries." *The Future of Children*, vol. 26, no. 1 (2016): 115–132., doi:10.1353/foc.2016.0006.

<sup>&</sup>lt;sup>10</sup> Edward Boyes and Martin Stanisstreet, "Children's Models of Understanding of Two Major Global Environmental Issues (Ozone Layer and Greenhouse Effect)." *Research in Science & Technological Education*, vol. 15, no. 1 (Taylor & Francis Group, 1997): 19–28, doi:10.1080/0263514970150102.

friendly literacy texts are an ideal way to share and introduce children to new vocabulary, such as climate, weather and migration, in a safe, open, and non-judgmental way.

Mary Lee Hahn further addresses the benefits of teaching language via literature. She advocates that children easily connect to and naturally form comparisons when listening to stories. During group 'read aloud' competent teachers can easily amplify or expand learning to meet the needs and ages of individual learners. Students are thus able to explore new or opposing ideas in a manner that is meaningful to them. Experts in the field, such as Powers, in *Cultural Property and Student Identity in the Multicultural Classroom* agree that awareness of, understanding of or even just familiarity with something "strange" and new is the first step towards developing empathy and tolerance for others. In my opinion, understanding and compassion for planet earth and all the organisms who depend on it, happens in a very similar manner. Once we truly understand and are aware of our climate and environment, we can develop a deep enough empathy that a true change of behavior is possible. Empathy for our environment, for the animals we share it with and for the people who depend on it, is a learned behavior. Empathy, compassion and responsibility are habits of character beneficial to students at all ages. Explicit teaching about the danger of global warming, pollution and deforestation is as urgently needed as explicit teaching about the dangers of racism, prejudice and bigotry.

Helping children to create a visual timeline or mind map of their own history does twofold. It allows students to clearly see cause and effect and just as powerfully, it allows students a chance to illustrate and share about their culture and heritage. Rousell et al reports that all students from marginalized and persecuted communities benefit directly from learning that affirms their culture, language, and beliefs, however this affirmation is especially important for students who are fleeing not only difficult environmental conditions, but also ethnic, religious or gang violence and conflict in their countries of origin. My students from Central America, Sudan, Syria, Afghanistan, and Myanmar, as well as the stateless Karenni on the Pakistan border are especially vulnerable to long term psychological and developmental concerns of cultural exclusion and prejudice. Anecdotally, my experience has shown that students not only benefit from having their unique gifts and language affirmed, but that they blossom and grow when in a safe welcoming environment, free from fear and violence.

Additionally, children are often as afraid of natural events such as storms as they are of human conflict and ISIS raids. Dorainne Levy and her colleagues hypothesize about and discuss the multitude of possible harmful side effects that people, especially children, may suffer when surrounded by stress and fear. "Detrimental physical and psychological conditions can stifle and limit a child's true potential and their ability to grasp opportunities and grow into a strong adult."

Isabel L. Beck, et al. *Bringing Words to Life, Second Edition: Robust Vocabulary Instruction*. Guilford Publications, Incorporated, 2013.

<sup>&</sup>lt;sup>12</sup> Hahn, Reconsidering Read Aloud.

<sup>&</sup>lt;sup>13</sup> Rousell and Cutter-Mackenzie-Knowles. "A Systematic Review of Climate Change Education."

<sup>14</sup> So, while it is impossible for a child to control some events, such as gang violence or immigration policies, they can be taught how to prepare for extreme weather lessening their overall anxiety and stress. Young students can learn specific actions that they and their families can do to directly affect global warming. This is tremendously powerful, knowing that you can affect the future at a global level. Students fleeing economic hardship, gang violence, personal loss and trauma need to believe that they are ok and that there are things they can do to make the world a better place. Echoing the conclusions of Sarah Ray in, *A Field Guide to Climate Anxiety*, this sense of empowerment is crucial to strong social emotional development. <sup>15</sup> This curriculum unit, *Overcoming Challenges: A Collaborative Project Exploring Natural Disasters and Climate Migration*, seeks to lessen anxiety and fear in our youngest scholars by building up their knowledge and self esteem as well as showing them how even small steps and small changes over time can lead to big differences.

# **Expansions**

Through discussion with peer buddies, younger students will gain a basic understanding of human rights and how we all share planet Earth. Students will begin to explore the idea that while people come from different places, look different, and speak different languages, we are all human beings. They will come to understand that how we treat the air, water and earth affects the weather. With the help of their peer buddies, they may use Chatterpix or Green Screen, to lessen an inherent fear of storms and natural disasters. Even more importantly, they will be able to express how their family's or themselves overcame diversity, even though it was scary and they were afraid. Older peer buddies could be encouraged to support and build up their younger partners and in doing so they will not only grow their own self esteem, but they will also gain a better understanding of their grade level content. Expansion activities, especially as students get older, can tag more specific and current experiences involving differences and division in the United States and Globally. Current events such as political differences in response to climate change, racial intolerance and bigotry, human rights, global pollution and environmental destruction for profit, as well as the subjective nature of describing who is a refugee and who is not are all possible topics.

In addition, student learning may be extended beyond discussing climate change as a push factor for migration. The teacher may choose to use the linked expansion texts, to further explore other causes of migration such as war, violence and poverty. Students can also be encouraged to explore the feelings involved in immigration and how it feels to be the "new kid" or the student who is different and/or does not speak the same language as the others.

<sup>&</sup>lt;sup>14</sup> Dorainne J. Levy, Jennifer A. Heissel, Jennifer A. Richeson, and Emma K. Adam,

<sup>&</sup>quot;Psychological and Biological Responses to Race-Based Social Stress as Pathways to Disparities in Educational Outcomes." *American Psychologist* 71, no. 6 (2016): 455–73. https://doi.org/10.1037/a0040322

<sup>&</sup>lt;sup>15</sup> Ray, A Field Guide to Climate Anxiety.

# **Language and Literacy**

Students will engage with and orally discuss the topics in the target literature. Teachers will support comprehension by building background, making connections and through careful use of visual aids, graphic organizers and language scaffolding. English Language teachers are aware that, even if children are currently in a 'Silent period' due to novice language proficiency, they do not come to us as blank slates. All children have prior experiences and cognitive skills in their first language: L1. By helping to establish and access cognitive hooks in L1, the process of learning the same skill in the second language: L2 is greatly simplified. As educators of English Learners, we are explicitly aware of the need to foster all four domains of language use; speaking, listening, reading and writing. This falls right into line with North Carolina Common Core standards and a greater interest and accountability in making sure that children are doing more than simply sitting as complacent by-standers in the learning process. All students, regardless of their placement along the continuum of language acquisition, are accountable for being able to read, write, speak and listen to key educational topics and content. As teachers, we are held accountable by federal mandate, to ensure that L2 speakers are able to access the same content and develop these same skills as well.

In part one of this unit, I will strive to first illustrate what our environment is and how weather and environment are connected. Then I endeavor to feed the idea that when the climate or weather changes dramatically in one place, it can lead to the animals, & by extension, the people who live there to migrate. we can use Nearpod to explore visual representations of migration. Texts that discuss/illustrate animal migration due to climate change will be presented as 'read aloud' stories to the whole group. These texts are the tool that sparks interest, questions and responses from students. The students, with teacher and family support, express orally, dramatically or in digital writing/drawing projects their thoughts on why and how animals are forced to migrate and how they might feel about this.

In part two of this unit, Students will be reminded of the habits of character that they learned about in the first grade Module one. They will be reminded about how the fictional characters in this module were able to overcome various challenges. The students will then be asked to think about how the animals we read about could overcome/overcame their challenge and which habits of character helped them the most. Through read-aloud and shared story experiences, children will acquire stronger descriptive repertoires and become better able to describe their own immigration journey/history as well as many other items in English. Students will be able to use Timeline Creator to sequence the events involved in forcing the polar bear or the elephants to migrate.

In part three of this unit, Students will meet either virtually or in person, with a peer buddy from 5th grade. The 5th grade students will present a visual presentation on Book creator or in Person to illustrate natural disasters' effects on people. Through teacher and technology

<sup>&</sup>lt;sup>16</sup> Jana Echevarría, Maryellen Vogt, and Deborah Short. *Making Content Comprehensible for English Learners: The SIOP Model*. Boston: Pearson, 2017.

presented language scaffolding, i.e. sentence frames and visual supports, students and peer buddies will be able to talk to each other about these events. They will be able to discuss how like the polar bear and the elephant we are strong enough and brave enough to overcome these challenges. Students will get to work with their peer buddy to create a timeline showing how they or their family overcame a difficult event. The teacher will try to guide them towards climatic events and/or migration journeys but the theme can be expanded to include things such as homelessness, job loss or even bullying and illness. Students and peer buddies will work together to create a visual image to represent each main event and these images will be embedded in the timeline to create a visual project that can be shared with other students, within the school or even with partners globally through the FlipGrid blog.

## **Preparation For and Outline of Unit**

A few days prior to the launch of the unit, it will be helpful for the facilitator/teacher to create an opportunity for students to experience how their lives and community are affected by climate and the environment. Take students on a nature walk and if possible expose them to examples of litter, destruction of farmland or forest. Talk to them about too much or too little rain and the water cycle. Brainstorm ways to protect the environment and which climate is ideal for us as humans. It's helpful to use the three little bear scenario, "not too hot and not too cold."

Teachers will need to use the attached Book Creator® picture books to open the discussion and make the connection of climate to migration. If required, connect the idea of migration to animal migration as well, such as with the polar bears, whales, birds or butterflies. Teachers read through the book "Climate Refugees" without stopping the first time. The second read teachers should stop on the pages such as the ones representing flood, hurricane, drought and deforestation and then ask children to share their impressions and experiences with their elbow buddies or directly within a small group. On the third read teachers will need to expand and explain the idea of migration and push factors.

Once students are familiar with the book Climate Refugees, they will be given the opportunity to learn about two fictional characters, Maria and Ali. The purpose of these stories is to provide a model to use when completing the guided instruction of the mind map or timeline and to illustrate how habits of character aided in overcoming a challenge.

After the teacher has guided the students in the process of completing a digital mind map with the provided fictional character, students will have the opportunity to either place the events of their own/ their family's migration journey into a digital timeline or mind map or they can use the second fictional character to show their ability to pull out the main events and how habits of character were utilized.

You can adjust the independent work activity to include older peer helpers or family units. Letters to the parents explaining this project and asking for collaboration should be sent home prior to initiation.

### Strategies for Teaching Vocabulary and Cultural Sensitivity

Even as an ESL teacher with twenty years of experience I am repeatedly bowled over by academic or content specific vocabulary gaps I discover in even my higher language proficiency students. In my experience consistent, constant exposure and re-enforcement of new vocabulary, through reading, casual conversation, hands on usage and direct explicit teaching are all useful. Research stipulates that a child needs to come into contact with a new word/concept at least seven times before it is acquired.

There is growing recognition that all children, not just English Language learners, who have weak vocabulary skills suffer significantly later on in their academic careers and life options as the gaps and holes become more and more noticeable.<sup>17</sup>

In a similar fashion, acceptance of differences, tolerance and dangers of prejudice must also be presented multiple times and in many different contexts. Likewise, a deficit in the ability to understand, navigate and accept diverse ideas, diverse behaviors and diverse people will hinder students in their future career and life goals. In this unit, children acquire new vocabulary, expand reading and writing skills while simultaneously acquiring new social skills and promoting character education. Students begin to understand how powerfully our global climate affects us all socially and psychologically.

# **Strategies for Involving Parents**

I've found, since we are only with students a part of their day, it is extremely helpful to bring parents in on the action. Parents of English Learners are often at a disadvantage because their families may lack the understanding and knowledge of cultural and academic expectations in their new country. Meeting these expectations will help their children to succeed. This knowledge is called cultural capital and our CTI seminar showed us how many minority communities are effectively marginalized due to the fact that they have differing cultural and academic expectations. Educational requirements, academic needs and essential skills are ever evolving. It is wise to explicitly show and teach parents what they should know about grade level expectations and future skills required to succeed.

Communication behaviors are one such skill that should be explicitly modeled. In our culture of collaboration and group work, the ability to discuss subjects in a deep and respectful manner is crucial. I explain to my student's parents as often as I can, that I constantly talk to and with my children. Not only does this build up language and vocabulary but also I have the opportunity to impact and discuss cultural and personal values. If we are driving home from a grocery store I consciously hold a running conversation of what all we saw there and ask about their perceptions or opinions. Sometimes, it is quite random and sometimes, I'm sure my kids have stopped listening, but still I continue to talk to them while I prepare a meal or assist with homework. I try very hard to impress upon my parents that they must do the same; they must sometimes take away/turn off the TV and computer games and talk to and with their children,

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<sup>&</sup>lt;sup>17</sup> Echevarría, et al, *Making Content Comprehensible for English Learners*.

beyond giving directions and commands. They must give Cartoon Network the night off and just talk together.

Playing twenty games of *Lego Star Wars* back to back, while engaging for the little guys, will not provide the rich language exposure that reading and discussing a book, the climate, environmental concerns or simply family traditions with a family member will. For the parents who argue that they don't speak English, I argue that 'talk', i.e. discussions aren't specific to English. If they'll build up their child's native language repertoire, this will help them make connections when they learn similar concepts in English. For example, a child who knows the science terms for weather events in Spanish easily learns the English words. It is the child who doesn't yet have the labels, or concepts in their native language who struggles to learn these things in a new language. A child without a strong native language and home culture foundation will be unsure and confused when faced with opposing cultural beliefs and traditions. So much treasure is lost when parents fail to share their cultural heritage in language, as passed down in songs, poems and oral stories. As a multicultural and multilingual society, we must help families understand that everyone has value, regardless of whether they speak English or whether they are literate. Families do not have to give up their history and language to embrace their future as Americans.

# **Instructional Implementation**

*Traditional Teaching Strategies*: Shared writing, turn and talk, read aloud, anchor charts, language amplification, scaffolding, peer review, rubrics and digital integration are employed throughout this curriculum unit.

Cooperative Groups or pairs: At many points students, especially English Learners will benefit by working in collaborative support groups, or alternatively known as Kagan groups. In such groups students with lower proficiency and/or academic deficits are able to get help and modeling from peers. The purpose of these groups is to provide language and task support as well as accountability and class cohesion.

LearnZillion supported conversation strategies, such as "Pinky Partners", "Chalk Talk", "Think-Pair-Share" and "Science Talks" will be also employed during discussion tasks,

GLAD and SIOP strategies such as inside-outside circle, four corners and visualization of content are also critical components in this instructional unit.

Mentor Text Read Aloud: Using mentor texts as read alouds can allow fluent reception of the language, as well as teacher-facilitated introduction to key topics and big ideas. The mentor

<sup>18</sup> Aafke Hulk and Elizabeth Van Der Linden, "Evidence for Transfer in Bilingual Children?" *Bilingualism: Language and Cognition* 1, no. 3 (1998): 177–80. https://doi.org/10.1017/s1366728998000297.

### texted I used include:

<u>Teacher Created Digital Picture Book</u> Climate Refugees by Lynne Wiesecke
<u>Teacher Created Fictional Character Stories</u> by Lynne Wiesecke
<u>Refugees and Migrants</u> by Ceri Roberts
<u>Finding Home: The Journey of Immigrants and Refugees</u> by Jen Sookfong Lee

*Rubrics:* Teachers create rubrics for specific groups as well as use those embedded in the Popplet, Timeline and Book Creator programming in order to guide and evaluate their own and each other's language projects.

*Technology Applications*: The primary students in this particular school use iPads as their technology support device, however the majority of the technology applications in these lessons are available in multiple operation systems and on any device with Internet availability. A variety of applications can be employed to extend and elaborate this project, especially if peer buddies are utilized, however, the two main applications used are:

- Book Creator app by Dan Amos
- *Popplet app* by Notion

Anchor Charts: Following G.L.A.D. strategies, the teacher will provide language and content knowledge support by covering the walls with anchor, comprehension and comparison charts. They will always be available for students to use as they complete their language projects.

Extension or Alternative Activities involving animal migration

- The Tantrum that Saved the World, by Megan Herbert and Michael E. Mann,
- How to Help a Hedgehog and Protect a Polar Bear by Dr Jess French

#### **Lessons and Activities**

### Day 1

**Focus & Review**: Target Question: What does Migrate mean? Ask students to tell you what they think "Migrate or Migration" might mean. Then explain that this word for animals means to move to a different region or country to find more food and to survive. Explain that people sometimes move in order to survive. When you pack all your things and move with your family to a new country we might say you migrate. When you migrate in, that is called to immigrate. People who migrate are called immigrants.

**Guided Practice:** Read the Climate Refugee Book once straight through without stopping. Then go back and ask students to help you re-read the pages, stopping to elaborate and talk about what they notice & wonder.

Independent Practice: Pull up pages 2, 3, 6, & 7 in the Climate Refugee book. Have students

"partner share" or "think-pair-share" in order to expound on what they know about these topics. Teacher progress monitors students as they 'share'. **Assessment (Ticket out the Door):** Our book today talked about..... Day 2 Focus & Review: Review Question: Ask students if they remember why do animals sometimes migrate? Why do people sometimes migrate? Ask students to think about how animals migrate. Now elicit a list of ways people can migrate. **Guided Practice:** Re- Read the Climate Refugee Book once straight through without stopping. Then go back and ask students to help you re-read the pages 11 - 15. Talk about how people migrate and why. Create an anchor chart of feelings about having to migrate by various modes of transportation and leave everything behind. **Independent Practice:** Review pages 11-15 in the Climate Refugee Book. Ask students to think about how it must feel to make a long journey by . Have students practice with a basic bubble map where they draw or list possible feelings around traveling by their chosen mode of transportation. **Assessment (Ticket out the Door)**: Today we talked about..... Day 3 Focus & Review: Focus Question - How do Habits of Character help immigrants migrate? How do Habits of character help you to face and overcome any challenge? Guided Practice: Read "Climate Refugee Stories" Read & discuss Maria's story. As a whole class, begin completing a paper or digital Character map on Maria. Describe how Maria and her family use Collaboration and Initiative to begin their migration journey. This is shared writing and is intended to be used as a model. **Independent Practice:** Students use turn and talk or pinky partners to orally discuss what they

know about Maria and how she used Collaboration and Initiative.

**Assessment (Ticket out the Door)**: Today we wrote about.....

## Day 4

Focus & Review: Focus Question - How do Habits of Character help immigrants migrate? How do Habits of character help you to face and overcome any challenge?

Guided Practice: Read "Climate Refugee Stories" Read & discuss Maria's story. As a whole class, continue to complete the paper or digital Character map on Maria. Describe how Maria

and her family use Perseverance and Responsibility when completing their migration journey and settling into their new homes. This is shared writing and is intended to be used as a model.

**Independent Practice:** Students use turn and talk or pinky partners to orally discuss what they know about Maria and how she used Perserverence and Responsibility.

Assessment	(Ticket out the Door	<b>)</b> :	Today we wrote about
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### Day 5

**Focus & Review**: Focus Question - How do you think Maria feels when climate change forces them to migrate? Talk about problems they might have had. Discuss how different habits of character helped them to overcome.

**Guided Practice:** Read "**Climate Refugee Stories**" Re-Read & further discuss Maria's story, what she experiences, how she feels and, how she overcomes. Help students create and orally practice "target sentences" using habits of character vocabulary.

Maria uses	when she	
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**Independent Practice:** Students make a photo or screenshot of their character map. They upload it into Book Creator and record themselves talking about at least one habit of character Maria used.

Assessment (	Ticket out the Door	):	Today w	e wrote a	about
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# Day 6

**Focus & Review**: Focus Question: How have you and your family been affected by Climate change? Alternatively read Ali's story or optional texts and discuss how they have been affected by Climate change? How were these challenges overcome by using Habits of Character?

**Guided Practice:** Re-read Climate Refugees or Read and review/discuss how severe weather events or environmental pollution can force people to migrate. Alternative/Optional texts include <u>"Finding Home"</u> or <u>Refugees and Migrants</u>.

Guided Technology/Independent Practice: Students use Popplet app to begin creating their own mind maps (this may require direct teacher instruction if the students are not familiar with this app, or are very young). Students think about how they or their chosen character and family have shown initiative and collaboration and then use the image icon and photo library to select appropriate images, from a set of images which the teacher has pre-chosen and dropped onto the iPads.

**Assessment (Ticket out the Door)**: Show completed mind map section to teachers.

### Day 7

**Focus & Review**: Focus Question: How have you and your family been affected by Climate change? Alternatively read Ali's story or optional texts and discuss how they have been affected by Climate change? How were these challenges overcome by using Habits of Character?

**Guided Practice:** Re-read Climate Refugees or Read and review/discuss how severe weather events or environmental pollution can force people to migrate. Alternative/Optional texts include <u>"Finding Home"</u> or <u>Refugees and Migrants</u>.

Guided Technology/Independent Practice: Students use Popplet app to continue creating their own mind maps (this may require direct teacher instruction if the students are not familiar with this app, or are very young). Students think about how they or their chosen character and family have shown responsibility and perseverance and then use the image icon and photo library to select appropriate images, from a set of images which the teacher has pre-chosen and dropped onto the iPads.

Assessment (Ticket out the Door): Show completed mind map section to teachers.

# Day 8

**Focus & Review**: Focus Question: How have you and your family been affected by Climate change? Alternatively read Ali's story or optional texts and discuss how they have been affected by Climate change? How were these challenges overcome by using Habits of Character?

**Guided Practice:** Brainstorm and create a word bank or words, phrases and quick sketches to aid students in writing captions below their pictures. Model how to use the T-text feature on popplet to add a caption to their chosen pictures.

**Guided Technology/Independent Practice:** Students use Popplet app to continue creating their own mind maps (this may require direct teacher instruction if the students are not familiar with this app, or are very young). Students use the T-add text icon and the teacher provided word bank, word wall and anchor charts to add captions to their pictures.

Assessment (Ticket out the Door): Show completed mind map section to teachers.

## Day 9

**Focus & Review**: Focus Question: How have you and your family been affected by Climate change? Alternatively read Ali's story or optional texts and discuss how they have been affected

by Climate change? How were these challenges overcome by using Habits of Character?

**Guided Practice:** Orally practice Habit of Character vocabulary (pronunciation). Ask students to volunteer some of their choices for responsibility, collaboration, initiative and perseverance. Practice orally using the target sentence structure with their vocabulary.

<u>\_(character or self)\_</u>used <u>\_(habit of character)</u>\_when <u>\_(caption)\_</u> .

**Guided Technology/Independent Practice:** Students make a screenshot or photo of their completed mind map. Then they upload it into a Shared Book Creator Book.

**Assessment (Ticket out the Door)**: Show completed mind map section to teachers.

## Day 10

**Focus & Review**: Focus Question: How have you and your family been affected by Climate change? Alternatively read Ali's story or optional texts and discuss how they have been affected by Climate change? How were these challenges overcome by using Habits of Character?

**Guided Practice:** Model how to record yourself in Book Creator. Model how to listen to and Respond to peers in Book Creator.

**Guided Technology/Independent Practice:** Students use the record feature in Book Creator to read, describe and explain their digital character maps. Following this students listen to and comment on each other's uploaded character maps.

**Assessment (Ticket out the Door)**: Character map is uploaded into Book Creator. Students have recorded their own map as well as listened and responded to at least one other map.

#### Resources

Materials

Ipads or other similar device
Student Centered Texts - see bibliography
Mentor Texts
Uploaded Applications or Liks
Projector/overhead screen
Poster board
Art materials
Sentence Strips
Photographs, Drawings or links to visuals

### **Applications Needed**

Book Creator online App - <a href="https://bookcreator.com/">https://bookcreator.com/</a>
iPad - Popplet App - <a href="https://www.popplet.com/">https://www.popplet.com/</a>
Optional
Nearpod online App - <a href="https://nearpod.com/">https://nearpod.com/</a>
Adobe Spark online App - <a href="https://spark.adobe.com/sp/iPad -Green Screen App">https://spark.adobe.com/sp/iPad -Green Screen App</a>
iPad camera App (or any camera device)

# Recommended Mentor Texts

Wiesecke, Lynne. Climate Refugees. Book Creator Library Program CMS, 2021.

In this photo story, young students are presented with visual images of climate events as well as environmental conditions that often become push factors for migration. This book ends on a positive note that while these events may be difficult, families find ways to persevere and overcome. In the end, families are able to find a new home, hope and a better future.

Wiesecke, Lynne. My Story. Book Creator Library Program CMS, 2021.

This book provides a language model for English Learners to follow as well as a safe fictional character for the students to use in their writing projects. Students use the first narrative portrayed in this book in order to complete a shared version of a mind map. The mind map used is a bubble map graphic organizer that shows how the character uses Habits of Character to overcome difficult events in their migration journey. Following the shared writing students use information in this book to retell their own migration story. Alternatively, the second character story can be used in lieu of one's own migration story by students to independently complete a digital mind map.

Roberts, Ceri, and Hanane Kai. Refugees and Migrants . Hauppauge, NY: Barron's, 2017. Print.

This book is part of a series of books written for students regarding difficult topics, such as climate change and migration. The book walks the students through how it feels to be a migrant. Similar to the teacher created text, this book uses powerful images to help children safely explore and experience the feeling involved in traumatic life experiences. This book doesn't directly connect migration and climate change, however it clearly shows how hunger, war, poverty and racism are factors influencing the decision to flee to a new home. In the unit, the teacher can show students how these factors and climate/environmental conditions are intrinsically connected.

Lee, Jen Sookfong, and Drew Shannon. Finding Home: the Journey of Immigrants and

Refugees. Victoria, British Columbia: Orca Book Publishers, 2021. Print.

In this text, Lee, again with sensitivity towards a younger audience, illustrates and expresses the range of feelings the immigration process elicits. Families in this text are migrating to Canada and for factors due to more than just climate change, however once again there are eerie connections between war and environmental catastrophe. There are clear illustrations of how poor people are marginalized and live in areas more dramatically affected by severe climatic events. This book helps the students expand their knowledge and understanding of the complex and interconnected web of events and decisions that drive migration around the globe.

Herbert, Megan, and Michael E. Mann. The Tantrum That Saved the World . Amsterdam

Netherlands: World Saving Books, 2017. Print.

This book presents the problem of climate change from the viewpoint of a little girl. This story does a good job of encouraging students to take action. It illustrates in an entertaining way how even young people and small steps can have a big impact on climate change. It's a very nice way to close this unit and transition to a future unit of community advocacy and responsibility.

**Teacher Created Digital Picture Book** by Lynne Wiesecke

**Teacher Created Character Stories** by Lynne Wiesecke

The Tantrum that Saved the World, by Megan Herbert and Michael E. Mann,

<u>Winston of Churchill: One Bear's Battle Against Global Warming</u>, by Jean Davies Okimoto, Illustrated by Jeremiah Trammel

<u>Our World Out of Balance: Understanding Climate Change and What We Can Do</u> by Andrea Minoglio (Author), Laura Fanelli (Illustrator)

What a Waste: Trash, Recycling, and Protecting our Planet by Jess French

Refugees and Migrants by Ceri Roberts, Hanane Kai (Illustrator)

<u>Finding Home: The Journey of Immigrants and Refugees</u> by Jen Sookfong Lee, Drew Shannon (Illustrator)

# **Appendix 1: Implementing Teaching Standards**

The Common Core is a set of high-quality academic standards in mathematics and English language arts/literacy (ELA). These learning goals outline what a student should know and be able to do at the end of each grade. Forty-one states, the District of Columbia, four territories, and the Department of Defense Education Activity (DoDEA) have voluntarily adopted and are moving forward with the Common Core. The Common Core State Standards addressed in this unit include, but are not limited to:

### **CCSS.ELA-LITERACY.SL.1.1**

Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

### CCSS.ELA-LITERACY.SL.1.2

Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

### CCSS.ELA-LITERACY.SL.1.4

Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.

### CCSS.ELA-LITERACY.SL.1.5

Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

#### CCSS.ELA-LITERACY.W.1.3

Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.

### CCSS.ELA-LITERACY.W.1.6

With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers

## Additionally, this unit covers standards specific to English Learners as follows:

<u>WIDA Standard #1</u>: Social and Instructional Language, specifically the students will speak, write, listen to, and read about self and others and corresponding social behavior.

WIDA Standard # 4: The language of Science, specifically weather, climate and environment.

<u>WIDA Standard # 5</u>: The Language of Social Studies, specifically migration, refugees, needs and wants.

# Appendix 2 -

#### **Resources Needed:**

Character Map Template

 $\underline{https://drive.google.com/file/d/1S8kTCv8P7qwOpgaTeIuFAl4k2aTTynLf/view?usp=drivesdk}$ 

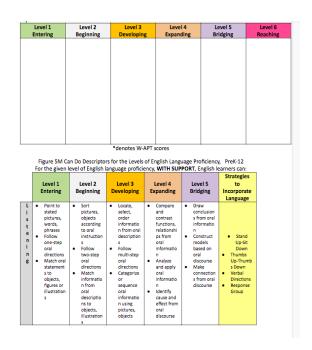
#### Self and/or Peer Evaluation Rubric

# Student Rubric (Primary or Novice Language Speakers)



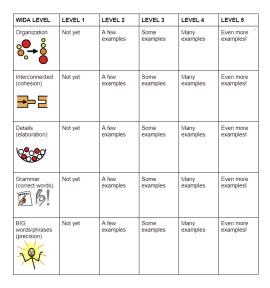
Wida Can Do Descriptor:

https://wida.wisc.edu/teach/can-do/descriptors



# Wida Levels Student Rubric (k-2)

 $\frac{https://docs.google.com/document/d/1MfRt3xLBiW-9cpD1bgACSKoujslp1416R6h93wwxb}{tk/edit?usp=sharing}$ 



# Appendix 3

# **Student Work Exemplars**

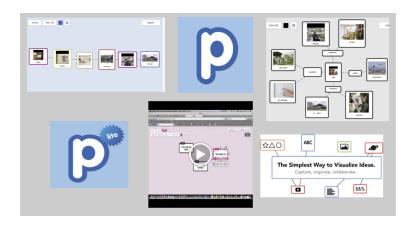
 $\frac{https://read.bookcreator.com/h9tknFEyemSwHYe7LsQubOmvTOi2/TmnkXuzcRjm20dPN}{JKGuQg}$ 



# **Appendix 4: Technology Directions and Information for Teachers**

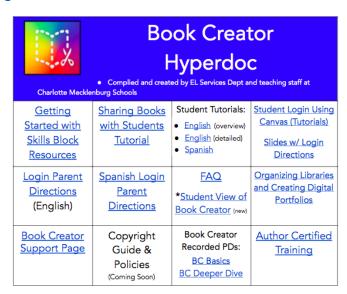
1. Directions for Using Popplet

 $\frac{https://docs.google.com/presentation/d/1U6besXjBgsBMysUWumPfRUPjIA9TZt-ng1Mbzd5hE}{AE/edit?usp=sharing}$ 



2. Directions for Using Book Creator Online Application & shareable library - (for teachers and students)

https://docs.google.com/document/d/1V-fQDuWY9tEMBDzk\_CQTtmq8s3tD8v1xYMnYcvnk2kY/edit?usp=sharing



3. Directions for Creating Expressive Language Projects (especially for the youngest learners)

 $\frac{https://docs.google.com/presentation/d/1jdCgwukw-Vb8ryuNCZXd4dsgKsd9QC9GggkczRSJcS}{8/edit?usp=sharing}$ 



# **Bibliography**

Beck, Isabel L., et al. *Bringing Words to Life, Second Edition: Robust Vocabulary Instruction*. Guilford Publications, Incorporated, 2013.

Barraza, Laura. "Children's Drawings About the Environment." Environmental Education Research, vol. 5, no. 1, Taylor & Francis Group, 1999, pp. 49–66, doi:10.1080/1350462990050103.

Boyes, Edward, and Martin Stanisstreet. "Children's Models of Understanding of Two Major Global Environmental Issues (Ozone Layer and Greenhouse Effect)." Research in Science & Technological Education, vol. 15, no. 1, Taylor & Francis Group, 1997, pp. 19–28, doi:10.1080/0263514970150102.

Crowley, Caitlin. "The Mental Health Needs of Refugee Children: A Review of Literature and Implications for Nurse Practitioners." Journal of the American Academy of Nurse Practitioners, Received: December 2007; accepted: June 2008, vol. 21, no. 6, Blackwell Publishing Ltd, 2009, pp. 322–31, doi:10.1111/j.1745-7599.2009.00413.x.

Echevarría, Jana, Maryellen Vogt, and Deborah Short. 2017. *Making Content Comprehensible for English Learners: The SIOP Model*. Boston: Pearson.

Green, Todd H. 2019. *The Fear of Islam: An Introduction to Islamophobia in the West*. Minneapolis: Fortress Press.

Hahn, Mary Lee. 2002. *Reconsidering Read Aloud: A Time for Teaching and Learning*. Portland, Me.: Stenhouse Publishers.

Hanna, Rema, and Paulina Oliva. "Implications of Climate Change for Children in Developing Countries." *The Future of Children*, vol. 26, no. 1, 2016, pp. 115–132., doi:10.1353/foc.2016.0006.

Hulk, Aafke, and Elizabeth Van Der Linden. 1998. "Evidence for Transfer in Bilingual Children?" *Bilingualism: Language and Cognition* 1 (3): 177–80. https://doi.org/10.1017/s1366728998000297.

Katz, Phyllis. Drawing for Science Education: An International Perspective. BRILL, 2017, doi:10.1007/978-94-6300-875-4.

Levy, Dorainne J., Jennifer A. Heissel, Jennifer A. Richeson, and Emma K. Adam. 2016. "Psychological and Biological Responses to Race-Based Social Stress as Pathways to Disparities in Educational Outcomes." *American Psychologist* 71 (6): 455–73. https://doi.org/10.1037/a0040322. Powers, P. K. 2005. "Cultural Property and Student Identity in the Multicultural Classroom." *MELUS: Multi-Ethnic Literature of the United States* 30 (2): 49–64. https://doi.org/10.1093/melus/30.2.49.

Ray, Sarah Jaquette. A Field Guide to Climate Anxiety: How to Keep Your Cool on a Warming Planet. 1st ed., University of California Press, 2020, doi:10.2307/j.ctvw1d67m.

Rousell, David, and Amy Cutter-Mackenzie-Knowles. "A Systematic Review of Climate Change Education: Giving Children and Young People a 'Voice' and a 'Hand' in Redressing Climate Change." Children's Geographies, vol. 18, no. 2, Routledge, 2020, pp. 191–208, doi:10.1080/14733285.2019.1614532.

Tompkins, Gail E., and Stephanie. Collom. Sharing the Pen: Interactive Writing with Young Children. Pearson/Merrill/Prentice Hall, 2004.

Verkuyten, Maykel, and Katerina Pouliasi. 2006. "Biculturalism and Group Identification." *Journal of Cross-Cultural Psychology* 37 (3): 312–26. https://doi.org/10.1177/0022022106286926.