



Case Story

Teaching on Air Lessons During Covid 19: Highlighting the Work of the KMOS Summer Classroom

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Abstract

This article provides an example of how a television station and a teacher education program located at the University of Central Missouri partnered to provide on-air lessons for kindergarten through fifth grade lessons to respond to the academic need due to the school shutdowns in spring 2020 because of COVID-19. The article highlights how three teacher candidates who were completing their student teaching semester were invited by the curriculum director of KMOS Summer Classroom to plan lessons to teach on- air. The curriculum director of KMOS Summer discusses the process of selecting the candidates and planning the lessons. The KMOS Summer Classroom perceptions of this project prepared them for their first year of teaching. Successes of KMOS Summer Classroom are highlighted along with next steps for implementation of KMOS Summer Classroom 2.0. This article aims to shares an experience other teacher preparation programs can consider when reaching their surrounding communities during a crisis or pandemic.

Introduction

When the 2020 semester started at the University of Central Missouri, teacher candidates (TCs) who were in their student teaching semester were eager to be in the classroom working side by side with a mentoring teacher five full days a week. The TCs in the early childhood and elementary teacher education programs already spent two full days in the classroom they were student teaching in during the fall 2019 semester. This transition into the classroom went smoothly because they already had established rapport with the mentoring teacher and students. In March 2020, the student teaching experience suddenly changed due to COVID-19. TCs at the University of Central Missouri either continued to

work virtually with their mentoring teacher or put learning packets together for students depending on the district they were placed in where technology was unavailable or where Wi-Fi was not accessible. Waivers for teacher certification were put in place by the Department of Elementary and Secondary Education (DESE). These waivers allowed TCs to become certified without completing their student teaching experience or passing the required assessment.

Not only were student teachers feeling the impact of COVID 19, but school districts were also facing challenges on meeting the needs of their students. Globally, the COVID-19 pandemic disrupted learning for 70% of students worldwide (United Nations Educational, Scientific, and

Cultural Organization, 2019). The school closure affected at least 55.1 million students in the United States (EDWeek.org, 2021). With districts facing challenges due to the abrupt closure of schools, I knew there was something that I wanted to do to help children and the teachers. Little did I know that my vision for providing lessons to those without the Internet would become a reality.

At the end of March 2020, I received a phone call from the Dean of the College of Education at the University of Central Missouri asking if I would be interested in being the curriculum director for the KMOS Summer Classroom. I was immediately interested in this opportunity because I wanted to help the children who were not receiving instruction due to the pandemic. I also had a strong desire to help ease the stress off teachers and families. I had a conversation with Josh Tomlinson, director of KMOS (PBS television station) and his vision for the KMOS Summer Classroom. His vision was to air lessons for kindergarten- fifth grade during June 2020 which meant planning lessons would need to occur during April and part of May and recording the lessons in the KMOS studio in mid-May to the beginning of June. Even though this was fast paced planning, this project marked the beginning of a rewarding experience for all involved.

Background of the Curriculum Director

As the Curriculum Director of KMOS Summer Classroom, I was excited for the opportunity to be involved in not only reviewing lessons across the content areas and multiple grades but also mentoring the three TCs. I have over 25 years of experience in education. I have served as a Prek-12th grade special education teacher, a classroom teacher, instructional coach, and an associate professor in early childhood and elementary education. My background includes writing curriculum for summer school programs when I served in Prek-12th grade settings. When I served in PreK-12th grade settings, I worked collaboratively with teachers on aligning grade level standards to the curriculum. When asked to serve as curriculum director, the former Dean of

the College of Education referred to me as the expert on curriculum. I would never consider myself an expert as much as I would consider myself passionate about providing students educational opportunities to help them reach their full potential.

Selecting the Candidates

The KMOS station is on the University of Central Missouri's campus. Josh Tomlinson wanted to partner with the College of Education due to the expertise of teaching and learning. He wanted to get the teacher candidates involved and provide them opportunities to develop in their teaching. As the director of curriculum for KMOS Summer Classroom, I was charged with the responsibility for securing the KMOS Summer Classroom Teachers. As the curriculum director, I reached out to three of the TCs who I observed during the fall 2019 senior practicum. I had a strong understanding of their teaching ability and understanding of curriculum. The goal of teacher education programs is to prepare future teachers with skills, knowledge and dispositions in teaching and learning (Santoyo & Zhang, 2016). Having worked with these three TCs during practicum, I knew they exhibited the needed skills and knowledge to plan and teach their lessons in a virtual format. Each of the three candidates were excited about the opportunity to be a part of a project that would impact thousands of children across the state of Missouri. The three TCs were not fully student teaching due to the pandemic, which allowed them time to be invested in the planning of the lessons.

Planning the Lessons

The three TCs were nervous and excited to begin their planning of lessons. Combined, the TCs created 72 lessons. Each TC was assigned grade levels to plan for during the month of April and part of May. One TC was responsible for kindergarten and first grade lessons while another TC was responsible for second and third grade. The third TC planned lessons for fourth and fifth grade. There were certain stipulations when

planning the lessons. Not only did the lessons have to be aligned to the Missouri State Learning Standards, but they also needed to be approximately 40 - 50 minutes due to the KMOS schedule. The children's books and other online resources had to be approved by Josh Tomlinson due to copyright. The three TCs were encouraged to use the PBS resources to guide their lessons. Additionally, the TCs were encouraged to provide wait time just like they would do in a face-to-face classroom. During the questioning in lessons, wait time is an essential part of the learning process (Alsaadi & Atar, 2019). Though the TCs could not gauge the level of understanding of those children viewing the lessons, it still allowed for them the opportunity to think about what was asked. An example of a K/1st grade lesson plan is provided in Appendix A.

The lessons were authentic and did not come from a purchased curriculum. Creating these authentic lessons provided the TCs experience to design lessons by utilizing resources, considering options, and implementing strategies which is all a part of teaching (Brown, 2011). TCs require support and guidance, so serving as the curriculum director provided this for them throughout the process. As the curriculum director, I encouraged the TCs to create lessons that they thought would spark the interest of children. I also suggested they use a lesson plan format and structure that worked for them since these would be their guide when teaching on air. The TCs taught lessons which were prerecorded in the KMOS studio, and the lessons were aired in June and July 2020. They reached children with a variety of learning needs and interests. The candidates were limited on the educational materials for planning their lessons. Educational materials are those curriculum resources considered to assist teachers in making decisions about lesson design (Beyer & Davis, 2009). Though they had limited resources, they were able to use their learning experiences from their teacher education preparation program to design their lesson plans. Additionally, as they planned, I reviewed the lessons and answered their

questions about the lessons they were planning. reviewed the lessons. The TCs' aired lessons are viewable on the kmos.org website. Ms. Alli taught lessons centered around kindergarten and first grade. Her lessons were focused on math, reading and writing, science, and social studies. For Ms. Kamryn, she prepared lessons for second and third grade. Her lessons were focused on math, reading and writing, science and social studies but were connected to a theme approach. Her themes included weather, fraction and fractured fairy tales, and animal adaptations. Lastly, Ms. Ashley focused lessons on math, reading and writing, science, and social studies. Allowing them choice in their lessons provided them an opportunity to be creative while making the lesson engaging and meaningful. An overview of each lesson topic is provided in Appendix B.

KMOS Classroom Teacher Perceptions

As the curriculum director of KMOS Summer Classroom, I reached out to the three TCs who prepared and taught the lessons to gather their insights on how this experience helped prepare them for their first year of teaching as well as the benefits and challenges of teaching lessons through this platform. Two of three candidates responded to the questions sent out via a Google Form. Questions asked in the Google Form:

1. As a first-year certified teacher, what grade level did you teach during the academic year 2020-2021?
2. During the 2020-2021 school year, were you in a rural, urban, suburban district?
3. What were the challenges of KMOS Summer Classroom?
4. What were the benefits of KMOS Summer Classroom?
5. Do you have a success story to share about KMOS Classroom?
6. How did KMOS Summer Classroom prepare you for instructional planning as a first-year teacher?
7. How did KMOS Summer Classroom prepare you for instructional delivery as a first-year teacher?

8. How did KMOS Summer Classroom prepare you to teach during COVID-19?
9. What advice would you provide for teacher candidates or classroom teachers who teach virtually or in an online teaching delivery such as KMOS Summer Classroom?

These questions provided insights on their perceptions of preparing and teaching on air lessons as well as how the experience helped them as a first-year teacher.

For the two KMOS Classroom Teachers (KMOS-CTs) who responded, during the 2020-2021 school year, both teachers taught 5th grade in a suburban school district.. For KMOS Summer Classroom, one of the teachers taught kindergarten and first grade lessons while the other teacher taught 4th and 5th grade lessons.

The questions centered around the challenges of KMOS Summer Classroom had different responses. One KMOS-CT acknowledged this experience allowed for creativity, but the planning was challenging and took her about 2 weeks to break down the standards for two grade levels (4th and 5th grades) to decide what was the most important to teach. She wrote that at the end, it was a rewarding challenge finding the most important standards to focus on for planning. The other KMOS-CT stated that making sure the lessons were engaging for students at home was a challenge. She emphasized that holding the engagement of a young child was important since they were viewing the lessons from television or a device.

The fourth question focused on the benefits of KMOS Summer Classroom. The KMOS-CT who planned fourth and fifth grade lessons was designated as the 5th grade virtual classroom teacher her first year of teaching. She wrote that because of the KMOS Summer Classroom opportunity, she was prepared to teach lessons because she already had lessons planned and ready to teach. She was able to assist other teachers with resources for virtual lessons as well as lead professional development on virtual

instruction. The KMOS-CT who taught kindergarten and first grade lessons stated that KMOS Summer Classroom helped familiarize her with important curriculum. She found it valuable to pick the Missouri Learning Standards she felt the children would benefit from the most.

When reviewing the response of the fifth question about a KMOS Summer Classroom success story, these were focused on being prepared for their interview and first year as teacher. KMOS-CT for the fourth and fifth grade was able to take the lessons she prepared and share those in her interview with the principal. The kindergarten and first grade KMOS-CT stated she was meant to be a part of the KMOS Summer Classroom experience. She credits this opportunity for her being successful as a virtual and face-to-face classroom teacher her first year.

For the two questions connected to how KMOS Summer Classroom helped prepare them for instructional planning and instructional delivery as a first-year teacher, responses were connected to diving into the Missouri State Learning Standards and the curriculum. Both KMOS-CTs stated that this opportunity allowed them an understanding of pulling out the essential standards and selecting resources which would be beneficial to student learning. Additionally, both KMOS-CTs wrote that teaching lessons for the first time can be “nerve-racking [sic].” KMOS Summer Classroom gave them the confidence to go into their first year of teaching when delivering lessons to their students since they were used to teaching in front of the camera.

The eighth question was focused on how KMOS Summer Classroom prepared them to teach their first year during COVID-19. The KMOS-CT of fourth and fifth grade was assigned the position of fifth grade virtual teacher. She stated she was not nervous about teaching over Zoom because she did something similar with KMOS. Furthermore, she had lessons planned for the fifth-grade level that she was able to easily implement in a virtual classroom. For KMOS-CT who taught kindergarten and first grade, she did not know she would begin

her first-year teaching fifth grade in a virtual classroom. She taught the first semester of her year in a virtual format. She stated she was nervous, but she was able to use some of her resources she made for the KMOS Summer Classroom her first semester as a virtual teacher.

The ninth question focused on the advice for someone who teaches online or in a virtual classroom. The two KMOS-CTs shared that teaching online or virtually can be challenging and hard at times. They both wrote that relationships with the students are important and are possible even through the screen. The KMOS-CT of fourth and fifth grade wrote that it is okay to check in with the kids about how they are doing as well as providing an exciting school year. She wrote that you could teach about anything you do face to face in a virtual environment with some creativity and modifications. The KMOS-CT of kindergarten and first grade wrote, "These kids need you, and while it also may be a bit more difficult for some students to learn virtually, you are still making a difference in their education and everyday life."

The nine questions given to the KMOS-CTs provided some beneficial insights on the challenges and the positive experiences they took away from participating in this project. They walked away from an opportunity that other student teachers were not given. Each one of the KMOS-CTs have a story to share in the future about teaching on-air lessons during a pandemic. They may never know how many children they impacted in summer 2020, but they entered their first year of teaching with confidence that they could teach virtually and most importantly build relationships with their students.

Challenges

KMOS Summer Classroom was a different experience from teaching virtually or delivering instruction in an online format. When teachers are delivering instruction virtually or online, they know their audience. They can build a rapport with the students and understand their learning needs. With the KMOS Summer Classroom, the TCs knew

their grade levels they were targeting but did not know who the students viewing the lessons. The TCs had limited experience with teaching in a virtual classroom. The TCs were faced with the challenge of teaching lessons in a television studio and had to learn about lighting and positioning of their visuals. Probably the biggest challenge of KMOS Summer Classroom was planning over 70 lessons in a short time frame. The TCs met the challenge and were able to plan their final lessons while recording the first set of lessons planned. It was a short time frame due to the need to air the lessons to help teachers, families, and most importantly the children viewing. Another challenge with KMOS Summer Classroom is the TCs were faced with pressure to perform. The three TCs selected were informed to lock down their social media accounts so viewers could not contact them with negative comments. This was one way to protect them under these circumstances.

KMOS Summer Classroom Outreach

We may never know exactly how many students across the state of Missouri, or the nation were impacted by the KMOS Summer Classroom. There were many ways the KMOS reached out to ensure the implementation of the on-air lessons could be viewed not only locally but nationally and internationally. The lessons were posted on air, Facebook, Twitter, YouTube, and the KMOS PBS app. One parent and her nine-year-old son sent a personal message to the curriculum director stating that her son woke up every morning to watch the 2nd/3rd grade teacher so he could do the science experiments. His favorite activity was reading *Thunder Cake* because he was able to make the cake with his mom. Another parent posted on social media that his children viewed the lessons from Germany.

The work of the KMOS Summer Classroom TCs did not go unnoticed. Each of the KMOS-TCs were offered teaching positions during the planning and recording of the lessons. Additionally, press releases on KMOS Summer Classroom and the collaborative partnership with the College of

Education at the University of Central Missouri highlighted those involved. One of the press releases was posted on the Columbia Daily Tribune (columbiatribune.com). The KMOS Summer Classroom participants were invited to a Zoom meeting to highlight their work with Ms. Paula A. Kerger, the President of PBS. Additionally in 2021, KMOS-TV and the College of Education were awarded by public media professionals within two categories: Community Engagement: Local Project, and Education: COVID-19 Education. The most profound success was delivering 72 lessons to children to support the classroom teachers and families during a disrupted school year. The three TCs stepped up to a challenge and to see their finished lessons aired in summer 2020 and again in summer 2021 is something that will be remembered for years to come.

Next Steps

The idea of the KMOS Summer Classroom is worth implementing again in the future. With the educational concerns that have emerged due to the pandemic, the KMOS Summer Classroom can assist teachers and families with this free service. In a report from Diemer and Park (2022), data from 2020-2021 showed that in Missouri alone, 95% of urban and suburban students living in poverty were in districts that offered distance education during the first full pandemic academic school year. Ten percent of rural students living in poverty learned remotely. It was also revealed that 25% of rural districts in Missouri offered access to tablets, computers, and hotspots whereas only 54% of rural districts only offered devices (Diemer & Park, 2022). Remote learning challenged parents from all backgrounds to become educational facilitators for their children (Office for Civil Rights, 2021). KMOS Summer Classroom's purpose was to assist not only the teachers during the closure but also the parents so they would not need to take on the role of educator. Additionally, the purpose of KMOS Summer Classroom was to provide on air lessons that parents could have their children view through the television.

The achievement gap from the pandemic is a

reality. In the report from Office for Civil Rights (2021), it stated: "Emerging evidence shows that the pandemic has negatively affected academic growth, widening pre-existing disparities. In core subjects like math and reading, there are worrisome signs that in some grades students might be falling even further behind pre-pandemic expectations" (p.iii-iv). Renaissance Learning (2022) spotlighted significant concerns regarding achievement scores. By late winter of 2020 to early 2021, elementary to middle school students were 8-11 weeks behind the mid-year expectations in math and 6-10 weeks behind in reading. Renaissance Learning suggested that schools need to observe several consecutive academic years of growth to get students back on track with pre-pandemic performance levels.

The goal is to provide additional opportunities for other TCs to be involved and gain the experience of teaching on-air lessons while giving back to the surrounding community to help close the learning gap. The hope for KMOS Summer Classroom 2.0 is to allow for planning during one semester and recording the lessons the following semester. Additionally, KMOS Summer Classroom 2.0 is going to continue the partnership with the University of Central Missouri's College of Education. The goal is to have five or six KMOS Summer Classroom 2.0 teachers who are interested in planning and implementing lessons for on-air. This experience will allow for other teacher candidates to engage in hands-on professional development when it comes to creating lesson plans and delivering them in a television studio.

Closure

Being able to be a part of the KMOS Summer Classroom was a dream come true. I wanted to provide a service to the school communities that would help with keeping the learning gap to a minimum. KMOS Summer Classroom was a perfect opportunity to provide this service and fulfill a need. The goal of KMOS Summer Classroom was to provide learning opportunities for those students who did not have access to the

internet through the one telecommunication medium found in homes, the television. Fifteen percent of the rural districts in Missouri did not provide any means of technology resources to students and 5% of the students were only offered internet (Diemer & Park, 2022). Providing KMOS Summer Classroom, a PBS station was one effective way to reach the students in the homes where internet was not available. Moving forward, preparing future teachers to be able to teach in various platforms is necessary. As educators it is important to “support equitable, effective teaching and learning regardless of the medium through which that takes place” (Darling-Hammond et al., p. 2, 2020). Further, this project opens the door for other universities and schools to think about how they can reinvent schools in times of a crisis or a pandemic. Within a short timeframe and no hesitation, the participants of KMOS Summer Classroom saw a need and responded to that need with enthusiasm and dedication. Collaborative partnerships such as the one with KMOS-TV and the College of Education at the University of Central Missouri was an example of how this is essential to meeting the learning needs of the students.



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Appendix A

Subject: Reading Topic: Retell/Beginning Middle End (BME) Grade: K/1st
Standards
1.R.1.A.d - Develop and demonstrate reading skills in response to reading text and read-alouds by retelling main ideas in sequence using key details K.R.1.A.c - With assistance, develop and demonstrate reading skills in response to read-alouds by retelling main ideas or important facts 1.R.1.A.e - Develop and demonstrate reading skills in response to reading text and read-alouds by recognizing beginning, middle and end K.R.1.A.e - With assistance, develop and demonstrate reading skills in response to read-alouds by recognizing beginning, middle and end
Learning Target
The student will be able to retell the beginning, middle and end of a story.
Resources and Materials
BME Anchor Chart The Three Little Pigs And The Somewhat Bad Wolf by Mark Teague Sequencing Slides - https://docs.google.com/presentation/d/1n-RWfh5k7k6seRmD9tMFV-KIA22dylvutFkMuFTCToc/edit?usp=sharing
Lesson Structure and Procedures
<p>1. Miss Alli will hook students using two sequencing activities:</p> <p>a. Plant life: show students the 4 pictures - These are the different steps a flower takes to grow. Do you think you could put these pictures in order? Let's give it a try! Review steps with students and number underneath pictures</p> <p>b. Peanut Butter Jelly Sandwich: Have you ever had a peanut butter and jelly sandwich? Can you think of the order you make a peanut butter sandwich in? I'll give you a hint....there's 4 main steps (give students think time in between each step)</p> <p>i. First, get out bread, pb, jelly and a plate and a knife</p> <p>ii. Next, take two slices of bread from the bag and put them on a plate</p> <p>iii. Then, with a knife spread the pb and jelly on the sandwich</p> <p>iv. Finally, put the two pieces of bread together and enjoy your sandwich</p> <p>2. Miss Alli will say we ordered the steps of how a plant grows and how you make a peanut butter and jelly sandwich. Did you know that books have an order they go in too? Every book has a beginning, middle and end. Today, we are going to practice retelling the beginning, middle and end of a story.</p>

3. Miss Alli will create BME anchor chart with students
4. Miss Alli will read The Three Little Pigs And The Somewhat Bad Wolf
5. Miss Alli will ask students, do you think this story had a beginning, middle and end? You're right, it did!
 - a. Let's start with the beginning of the story? Can you think of any characters that we met? Do you remember what happened?
 - b. Put up pictures of the story and BME statements - ask students if they can match the words to the picture
 - i. B: The three little pigs build their houses out of straw, sticks and bricks
 - ii. M: The big bad wolf blew down the first and second little pigs houses so they had to go away.
 - iii. E: The three little pigs invited the wolf in after he couldn't blow down the third little pig's house and they became friends.
 - c. Review bme answers with pictures
6. Miss Alli will say today, we practiced putting the events of a story in order. Recognizing the BME of a story will help you recall what happened in the story. See if you can draw pictures to represent the BME of the next story you read and explain your pictures to someone in your house.

Appendix B

Teacher: Ms. Alli (K-1)	
Lesson	Lesson Description
01 (101)	The student will be able to recognize that two-digit numbers are made up of tens and ones.
02 (104)	The student will be able to investigate how sound can make materials (matter) vibrate and how vibrating materials (matter) can make sound.
03 (107)	Reading: The student will be able to predict what will happen next in a story by using prior knowledge and asking questions.
04 (110)	The student will be able to recognize that two-digit numbers are made up of tens and ones.
05 (113)	The student will be able to solve addition problems within 20.
06 (116)	The student will be able to observe, identify and describe the appearance of the sun, moon, and stars at different times of the day.
07 (119)	Reading: The student will be able to retell the beginning, middle and end of a story. Phonemic Awareness: The student will blend onsets and rimes to make words.
08 (122)	The student will be able to accurately solve subtraction problems within 20.
09 (125)	The student will be able to recognize and tell the value of a penny, nickel, dime and quarter.
10 (128)	The student will be able to recognize what plants and animals need to survive.
11 (131)	Reading: The student will be able to compare and contrast characters from similar stories. Phonics: The student will be able to distinguish long from short vowels in written and
12 (134)	The student will be able to collect, organize and represent data with up to 3 different categories from different graphs.
13 (137)	The student will be able to name each shape and identify the number of sides and vertices for each shape.

Appendix B

Teacher : Ms. Ashley (4-5)	
Lesson #	Lesson Description
01 (103)	This lesson will cover how to find the theme or moral within a story using details within the text.
02 (106)	This lesson will review the properties of solids, liquids, and gases including their particle movement.
03 (109)	This lesson reviews prime numbers and how to find the factors of composite numbers up to 100.
04 (112)	This lesson will review how to infer using textual evidence within a reading.
05 (115)	This lesson will review how students reference and provide textual evidence when drawing conclusions.
06 (118)	This lesson will review where energy comes from.
07 (121)	This lesson will review how to generate equivalent fractions.
08 (124)	This lesson will review various character traits and how to identify those in the characters of the text.
09 (127)	The lesson will review how to identify the climax and resolution in a story using the character developments throughout the story.
10 (130)	This lesson will review the Sun and stars and their jobs in our solar system.
11 (133)	This lesson will review how to compare and order fractions.
12 (136)	This lesson will review how authors use figurative language to help the reader create mental pictures and deepen comprehension.
13 (139)	This lesson will review how to add fractions.
14 (142)	This lesson will review the causes and consequences of the Civil War.
15 (145)	This lesson will review how to subtract fractions.
16 (148)	This lesson will review how text features show important information and how to locate information using text features.
17 (151)	This lesson will review how to multiply fractions
18 (154)	This lesson will review key economic terms and how economics plays apart in our nation.
19 (157)	This lesson will review how to multiply fractions
20 (160)	This lesson will review the different types of authors purposes and how to identify each.

Appendix B

21 (163)	This lesson will review how to convert large units into smaller units.
22 (166)	This lesson will review the causes of the American Revolution and why the colonists'
23 (169)	This lesson will review how to evaluate numerical expressions involving money.
24 (172)	This lesson will review how to recognize foreshadowing within a text.
Teacher:Ms. Williams (2-3)	
Lesson #	Lesson Description
01 (102)	What is Weather?
02 (105)	How do we Measure Weather?
03 (108)	Water in the Air: All About the Water Cycle
04 (111)	What are Clouds?
05 (114)	What is Extreme Weather and How does it Occur?
06 (117)	Thunder Cake: Personal Experiences of Extreme Weather
07 (120)	What is Climate?
08 (123)	How to Graph Temperature
09 (126)	How to Graph Precipitation
10 (129)	Introduction to Fractions and Fractured Fairy Tales
11 (132)	Fractions in the Pizzeria and Fractured Fairy Tales
12 (135)	Comparing and Equivalent Fractions & Fractured Fairy Tales
13 (138)	Fractions in the Bakery and Fractured Fairy Tales
14 (141)	How Many Whoppers and Fractured Fairy Tales
15 (144)	How Many Candies and Fractured Fairy Tales
16 (147)	How Much Ketchup and Fractured Fairy Tales
17 (150)	Introduction to Animal Adaptations
18 (153)	Types of Animal Adaptations
19 (156)	The Desert Biome and Desert Animal Adaptations
20 (159)	The Grassland Biome and Grassland Animal Adaptations
21 (162)	The Arctic Biome and Arctic Animal Adaptations
22 (165)	The Ocean Biome and Ocean Animal Adaptations
23 (168)	The Rainforest Biome and Rainforest Animal Adaptations
24 (171)	The Mountain Biome and Mountain Animal Adaptations/Review