SECTION III: RECOMMENDED CHILD FIND PROCEDURES

The recommended child find procedures described herein are designed to help the public agencies, either cooperatively and/or individually to (1) locate, evaluate and identify children birth to twenty-one (21) years with disabilities; (2) collect, maintain, and report data; and (3) maintain a process for coordination and collaboration between various agency programs. A guide is presented to assist in planning and implementing the Child Find Program.

A. Establish Child Find Planning Committee (Optional)

A Child Find Planning Committee may be established to facilitate child find activities. Interagency commitment is necessary to prevent duplication of effort. Members could include but are not limited to representatives of:

1. Parents
2. School Districts, including Charter Schools
3. Education Service Cooperatives
4. Early Intervention Programs
5. Private Schools
6. Medical Providers
7. Advocacy Organizations
8. Other Related Agencies
9. Additional Resource Personnel as needed

The LEA will be responsible for the ongoing development, implementation and evaluation of all activities in their respective areas and will ensure coordination within the Child Find Planning Committee. The size of this committee may vary, but should be of a size that allows for effective planning.

B. Developing a Child Find Plan

Each Local Education Agency, including Cooperatives who provide early childhood services, are required to have a written child find plan. The local

plan must state the systems in place for child find, and how the process is ongoing. These plans must be available for ADE review when requested.

The plan must include the following:

1. School District boundaries;
2. before major identification, location, or identification activity a notice to parents must be announced to parents in newspapers or other local media;
3. procedures for conducting school screening; and
4. before child find begins notice to parents published or announced in newspapers or other media.

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PLANNING THE LOCAL CHILD FIND PROGRAM

1. **Establish a local child find interagency committee (optional).**
    a. Identify target groups and or agencies to make up committee membership.
    b. Define the geographic boundaries.
    c. Select and invite individuals to represent targeted groups or agencies.
2. **Provide orientation training to child find planning committee (optional).**
    a. Distribute Child Find Procedural Guide to committee members.
    b. Review purpose and general responsibilities to conduct child find.
    c. Identify general responsibilities for targeted groups and/or agencies.
    d. Elect chairperson(s) for Child Find Planning Committee activities.
3. **Develop a written plan that includes:**
    a. School District boundaries;
    b. before major identification, location, or identification activity a notice to parents must be announced to parents in newspapers or other local media;
    c. procedures for conducting school screening; and
    d. before child find begins notice to parents published or announced in newspapers or other media.

PUBLIC AWARENESS

1. Define specific responsibilities for public awareness.
    a. Identify awareness activities for:
        i. Schools
        ii. Parents/guardians
        iii. Target groups

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iv. Agencies
v. Civic groups
vi. Communities

b. Outline media/activities.
c. How child find activities are announced in newspapers, radio, social media, and other media.
d. A description of the public awareness campaign done by the district.
e. Evaluate awareness campaign.

PUBLICITY

1. Suggested strategies for publicity.
    a. Utilize child find materials from ASERC.
    b. Contact with local newspaper; radio; television/ Cable.
    c. Speak to groups and civic groups and organizations.
    d. Provide information and training for:
        i. school personnel
        ii. target groups
        iii. Agencies
        iv. communities

SCREENING

1. Identify screening activities.
    a. Identify who and where screening will take place.
    b. Determine timelines.
    c. Organize community screening programs.
    d. Determine instruments to be used:
        i. Standardized achievement
        ii. Grade cards
        iii. Inventories

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iv. Observation
v. Hearing screening
vi. Vision screening
vii. Speech/Language
viii. Developmental
ix. Behavioral
x. Cognitive

e. Maintain data on number screened and referred and number screened and not referred.
f. Evaluate effectiveness of screening program.

IDENTIFICATION AND EVALUATION

1. **Inform target groups of referral procedures.**
   - **a.** Designate person(s) to receive referrals.
   - **b.** Provide information to LEA to assist in arranging for initiation of due process.
   - **c.** Conduct individual evaluations as appropriate as outlined in the Procedural Requirements and Program Standards ADE 2018.
   - **d.** Maintain data on numbers identified, evaluated and placed and the number of students evaluated and not placed.
   - **e.** Evaluate the effectiveness of identification and evaluation activities.

CHILDREN IN PRIVATE SCHOOLS

1. **Identify all private schools within the geographic area including religious schools**
   - **a.** Establish contact representative in each private school.
   - **b.** Consult with representatives of private schools on how to carry out the location, identification and evaluation of children suspected of having a disability that are attending the private school.
   - **c.** Implement identification procedures in each private school as required under Section 14 of the Procedural Requirements and

Program Standards Manual ADE 2000.

d. Maintain documentation of the number of students:

i. screened
ii. evaluated
iii. determined to have a disability under IDEA - Established Individual Service Plans (ISP)

HIGHLY MOBILE CHILDREN WITH DISABILITIES (SUCH AS MIGRANT AND HOMELESS CHILDREN)

1. Identify district personnel responsible for homeless, migrant and highly mobile
    a. Coordinate with district personnel responsible for homeless, migrant and highly mobile families in the district.
    b. Insure public awareness campaign includes: shelters, motels and other locations where individuals might reside when homeless, migrant and highly mobile, etc.
    c. Maintain data on the number of children located that are homeless, migrant and highly mobile within the geographic area.
    d. Insure that location, identification and evaluation procedures are implemented in accordance with Procedural Requirements and Program Standards ADE 2000.
    e. Maintain data on number screened, referred, evaluated and determined to have a disability under IDEA.
    f. Evaluate the effectiveness.

CHILDREN WHO ARE SUSPECTED OF HAVING A DISABILITY AND NEED SPECIAL EDUCATION EVEN THOUGH THEY ARE ADVANCING FROM GRADE TO GRADE

1. Establish a pre-referral committee.

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a. Utilize referral committee to review
    i. group norm NRT and CRT scores to match grades
    ii. documented teacher concerns
    iii. teacher observations
b. Identify students suspected of having a disability but still advancing from grade to grade.
c. Make appropriate referrals and evaluations to determine need for special education/ interventions.
d. Evaluate committee's effectiveness by documenting:
    i. number of students reviewed
    ii. number of students referred for evaluation
    iii. number of students placed for services
    iv. number of repeat referrals

Child Find Plan (Example)

The following example is provided to assist public agencies in complying with Federal and State Child Find requirements.

CHILD FIND PLAN FOR:

Program Name

Program Year

I. Child Find Planning Committee Membership:

Agencies Represented:

Parent:

School District, including Charter Schools:

Education Service Cooperatives:

Early Intervention Programs:

Private Schools:

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Medical Providers:

Advocacy:

Other Related Agencies:

Others as Necessary:

II. This child find plan covers the geographic boundaries of:

PLANNING THE LOCAL CHILD FIND PROGRAM **Yes / No**

DOCUMENTATION OF COMPLETED ACTIVITIES:

PUBLIC AWARENESS **Yes / No**

DOCUMENTATION OF COMPLETED ACTIVITIES:

PUBLICITY **Yes / No**

DOCUMENTATION OF COMPLETED ACTIVITIES:

SCREENING **Yes / No**

DOCUMENTATION OF COMPLETED ACTIVITIES:

IDENTIFICATION AND EVALUATION **Yes / No**

DOCUMENTATION OF COMPLETED ACTIVITIES:

CHILDREN IN PRIVATE SCHOOLS **Yes / No**

DOCUMENTATION OF COMPLETED ACTIVITIES:

HIGHLY MOBILE CHILDREN WITH DISABILITIES (SUCH AS MIGRANT AND HOMELESS CHILDREN) **Yes / No**

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DOCUMENTATION OF COMPLETED ACTIVITIES:

CHILDREN WHO ARE SUSPECTED OF HAVING A DISABILITY AND NEED SPECIAL EDUCATION EVEN THOUGH THEY ARE ADVANCING FROM GRADE TO GRADE **Yes / No**

DOCUMENTATION OF COMPLETED ACTIVITIES:

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[1]Individuals with Disabilities Education Act (IDEA) reference 34 CFR 303.302 & 300.111

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Dyslexia Resource Guide

December 2017

Additional resource documents will be added as available.

For questions or concerns, please email: vicki.king@ade.arkansas.gov

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Purpose of the
Arkansas Dyslexia Resource Guide

The purpose of the Arkansas Dyslexia Resource Guide is to provide school districts, public schools, and teachers with guidance to meet Ark. Code Ann. § 6-41-601 *et seq*. This guide will clarify the "Arkansas Department of Education Rules Governing How to Meet the Needs of Children with Dyslexia" related to the assessment, identification, and services for these students. The Dyslexia Resource Guide will be developed and updated by a committee of ten representatives; they have experience working in the field of dyslexia intervention appointed by the Commissioner of Education from the following organizations:

i) The Arkansas Association of Educational Administrators (AAEA);
ii) The Arkansas Department of Education, Learning Services (ADE);
iii) The Arkansas Department of Higher Education (ADHE);
iv) The Arkansas Education Association (AEA);
v) The Arkansas School Boards Association (ASBA);
vi) The Arkansas School Psychology Association (ASPA);
vii) An Education Service Cooperative Administrator (ESC); and
viii) Three professionals who have worked in a public school and are knowledgeable in and have expertise in dyslexia screening and interventions.

Since Arkansas is a local-control state, school districts have considerable autonomy in making decisions regarding the screeners, diagnostic tools, and instructional programs to use. However, the department is charged with defining the dyslexia therapy training program. Information in this regard is included in this guide.

Introduction

Dyslexia refers to a learning disability that affects reading and writing. What dyslexia is, what causes it, and what can be done about it are commonly misunderstood topics. For example, a commonly held belief is that dyslexia results in seeing things reversed. When in fact, dyslexia is not due to a problem with vision, but rather a problem within language.

Although much remains to be learned about dyslexia, remarkable progress has been made in our understanding as a result of decades of research. The goal of this guide is to provide information about dyslexia that is intended to be helpful to educators, parents, and students.

Section I
Defining Dyslexia

It is important to acknowledge that students may struggle for many reasons when learning to read, including lack of motivation and interest, weak preparation from the preschool home environment, weak English language skills, or low general intellectual ability (Snow, Burns, & Griffin, 1998). In fact, the family and socio-cultural conditions associated with poverty actually contribute to a broader and more pervasive array of reading difficulties in school-aged children than do the neurological conditions associated with dyslexia. Students with dyslexia represent a *subgroup* of all the students in school who experience difficulties learning to read.

Dyslexia is defined in Ark. Code Ann. § 6-41-602 as a learning disability that is neurological in origin, characterized by difficulties with accurate and fluent word recognition, poor spelling and decoding abilities that typically result from the phonological component of language. These characteristics are often unexpected in relation to other cognitive abilities. This definition is borrowed from the most widely accepted current definition of dyslexia that is used by the International Dyslexia Association:

> Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.

It is useful to consider each of the elements of this definition:

Dyslexia is a specific learning disability that is neurological in origin. Dyslexia is a term used to refer to a specific type of learning disability. It is important to understand that students can be diagnosed with a specific learning disability as defined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V), but not automatically qualify as having a disability as defined in Individuals with Disabilities Education Act (IDEA, 2004), and the Arkansas special education rules and regulations, which govern the provision of special education services to students with disabilities. These regulations specify that each school district is responsible for ensuring that all children with disabilities within its jurisdiction who are in need of special education and related services are identified, located, and evaluated. The regulations make clear that having a disability, in and of itself, does not make a child eligible for special education services. The child must also have a need for special education and related services arising from that disability. The impact of the disability on the child must be significant enough that it adversely affects the student's access to general education curriculum, and the child's ability to make meaningful educational progress.

The statement that dyslexia is neurological in origin implies that the problem is not simply one of poor instruction or effort on the part of the student. Individuals with dyslexia struggle to read well despite adequate instruction and effort. Dyslexia tends to run in families; a child from a family with a history of dyslexia will not necessarily have dyslexia but inherits a greater risk for reading problems than does a child from a family without a family history of dyslexia. Brain imaging studies show differences in brain activity when individuals with dyslexia are given reading-related tasks compared to the brain activity shown by normal readers. Although it is tempting to view differences in brain activity as the cause of dyslexia, these differences are just as likely or even more likely to be a consequence of the reading problem rather than the cause of it. The reason for saying this is that when individuals with dyslexia respond

positively to intervention, their brain activity “normalizes” and becomes comparable to that of normal readers.

Dyslexia is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. A common feature of dyslexia is difficulty with accurate and/or fluent word recognition and by poor spelling and decoding abilities. Although students with dyslexia can show a variety of subtle or not-so-subtle language problems prior to entry in school (Catts & Kahmi, 2005), their problems become very noticeable once they begin learning to read. They have extreme difficulties acquiring accurate and fluent phonemic decoding skills (phonics), and this interferes with their ability to read text accurately or to read independently. Students with dyslexia struggle to acquire both knowledge of letter-sound correspondences and skill in using this knowledge to “decode” unfamiliar words in text. In first grade, their difficulties with accurate word identification quickly begin to interfere with the development of text reading fluency. Difficulties decoding unfamiliar words in text interfere with the development of fluency because, to become a fluent reader in the primary grades, students must learn to recognize large numbers of words automatically, or at a single glance. Students learn to recognize individual words “by sight” only after they accurately read them several times (Ehri, 2002). Thus, the initial difficulties that students with dyslexia have in becoming accurate and independent readers interfere with the development of their “sight word vocabularies,” and they quickly fall behind their peers in the development of reading fluency.

These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. The discovery that students with dyslexia experience difficulties processing the phonological features of language was important in establishing the foundations of the current scientific understanding of dyslexia (Liberman, Shankweiler, & Liberman, 1989). The phonological processing problems of students with dyslexia are usually not severe enough to interfere with the acquisition of speech, but they sometimes produce delays

in language development, and they significantly interfere with the development of phonemic awareness and phonics skills for reading. Spoken words are composed of strings of phonemes, with a phoneme being the smallest unit of sound in a word that makes a difference to its meaning. Thus, the word *cat* has three phonemes, /c/-/a/-/t/. If the first phoneme is changed to /b/, it makes the word *bat*, or if the second phoneme is changed to /i/, it makes the word *bit*. When students first begin to learn to read, they must become aware of these individual bits of sound within syllables, so they can learn how our writing system represents words in print. The letters in printed words correspond roughly to the phonemes in spoken words. Once a child understands this fact, and begins to learn some of the more common letter/sound correspondences, he/she becomes able to "sound out" simple unfamiliar words in print. Skill in using phonemic analysis to identify words that have not been seen before in print (and beginning readers encounter these words in their reading almost every day) is one of the foundational skills required in learning to read text independently (Share & Stanovich, 1995). Because of their phonological processing difficulties, students with dyslexia experience difficulties acquiring phonemic awareness, which is followed by the difficulties learning letter sounds and phonemic decoding skills that have already been described. Phonological processing skills are only moderately correlated with general intelligence, so it is possible to have average, or above average general intellectual ability and still experience the kind of reading difficulties observed in students with dyslexia. A student can also have below average general intellectual skills and have the same kind of phonological processing disabilities. Dyslexia is *not caused* by low general intellectual ability, but rather by special difficulties processing the phonological features of language, that can coexist with above average, average, or below average general intellectual ability. Phonological processing abilities required for acquisition of early reading skills are normally distributed in the population, just like musical talent, athletic ability, or most other human abilities. It is possible to have extremely weak phonological processing skills or to be only mildly impaired in this area. It is also possible to have above average skills in the phonological domain.

If students have extreme phonological processing weaknesses, it is very difficult for them to acquire early reading skills, while students with mild difficulties in this area often require only a moderate amount of extra instruction to become good readers (Wagner & Torgesen, 1987).

Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge. One of the most serious consequences of early difficulties becoming an accurate, confident, fluent, and independent reader is that students read less. For example, a study from 1988 indicated that students reading at the 50th percentile (average) in 5th grade read about 600,000 words in and out of school during the school year. In contrast, students reading at the 10th percentile read about 50,000 words during the same period of time (Anderson, Wilson, & Fielding, 1988). Large differences in reading practice emerge as early as the beginning of first grade (Allington, 1984). In addition to directly affecting the development of reading fluency, these practice differences have a significant impact on the development of other cognitive skills and knowledge, such as vocabulary, reading comprehension strategies, and conceptual knowledge (Cunningham & Stanovich, 1998). This latter type of knowledge and skill, in turn, is important for comprehension of texts in upper elementary, middle, and high school (Rand, 2002). Of course, other "secondary consequences" to the child's self-esteem and interest in school can be just as important as the effect on intellectual skills in determining ultimate school success.

Section II
Early Indicators and Characteristics of Dyslexia

Characteristics of students with dyslexia follow from how it is defined. Students with dyslexia are likely to perform poorly on measures of phonological processing, decoding nonwords, and developing an adequate pool of sight words.

Beginning with phonological processing, measures of phonological awareness tend to be most predictive of success at early reading. Common phonological awareness tasks include elision (saying a word after dropping a sound), blending, and identifying sounds in words. Phonological memory can also be affected, and phonological memory tasks can be particularly useful for young children who sometimes find phonological awareness tasks too cognitively complex to understand. Common phonological memory tasks include digit span and nonword repetition. Finally, learning to read involves pairing pronunciations with visual symbols. Rapid naming tasks measure the extent to which children have been able to link pronunciations with symbols. Examples of rapid naming tasks include quickly naming objects, colors, digits, or letters.

Turning to reading, difficulty in learning the names and sounds of letters is an early indicator of dyslexia. Perhaps the most central characteristics of dyslexia are problems in word-level reading. Difficulties are found in both accuracy and speed or efficiency at decoding nonwords and sight words. Difficulty with reading words results in slow and error-prone oral reading fluency. Spelling and writing problems are common. Reading comprehension difficulties are also common, but are considered to be largely a secondary problem caused by the primary problem of difficulty in fluently reading the words on the page.

Children likely to have difficulties learning to read can be identified as early as preschool or kindergarten, but it is frequently not possible to differentiate in preschool or kindergarten between students who have dyslexia and students who are at risk for reading problems for other reasons. For example, the clearest early indicators of

dyslexia in kindergarten are difficulties acquiring phonemic awareness, learning letter/sound correspondences, and learning to decode print using phonemic decoding strategies (Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2001). Unfortunately, many children of poverty, or those with limited exposure to Standard English in their homes, also manifest these same types of difficulties in kindergarten. An accurate diagnosis of dyslexia in preschool or kindergarten is more likely when these problems occur in students who: 1) have strong abilities in other areas of language such as vocabulary; 2) come from homes that provide a language and print rich preschool environment; and, 3) have a first or second-degree relative who experienced severe early reading difficulties. However, inherent phonological processing difficulties can also occur in children of poverty who come to school with limited vocabularies and knowledge of print. Although the phonological weaknesses of these students most likely result from a lack of certain kinds of language experience in the home, they may also be the result of biologically based, inherent phonological processing weaknesses.

Section III
Dyslexia Intervention and Response to Intervention (RTI)

If the initial, level I, or level II dyslexia screening indicates that a student has characteristics of dyslexia, the Response to Intervention (RTI) process shall be used (Ark. Code Ann. § 6-41-603 (c)(1)). Dyslexia intervention services fall under the RTI framework. If dyslexia screening indicates characteristics of dyslexia exist, then the student shall be provided dyslexia intervention services (Ark. Code Ann. § 6-41-603 (c)(2)(A)).

Response to Intervention (RTI) is designed to ensure all students receive effective, evidence-based instruction to meet their learning needs. The RTI process combines prevention and intervention with ongoing assessment in a school-wide system to identify a student's instructional needs and appropriate learning supports. Students exhibiting the characteristics of dyslexia are to receive dyslexia intervention. For a student with an IEP, dyslexia intervention may be delivered in the general education setting, the special education setting, or in a combination of the two. Regardless of the setting, the person delivering the dyslexia intervention must be a trained dyslexia interventionist delivering the program with fidelity. Additional information about special education and dyslexia can be found in Section XII.

A student exhibiting the characteristics of dyslexia does not have to progress through the various tiers of RTI before receiving dyslexia intervention services. Dyslexia intervention is small group instruction delivered by a trained dyslexia interventionist using the school's selected dyslexia intervention program or programs. Progress monitoring is a part of RTI and should be frequent and ongoing. The data should be used to monitor a student's progress on both the content covered during the intervention lessons and the student's progress toward meeting grade level standards. The data will drive decisions regarding details such as frequency, length, duration, intensity of sessions.

Information specific to RTI can be found on the Arkansas Department of Education website under RTI Arkansas.

http://www.arkansased.gov/divisions/learning-services/curriculum-and-instruction/rti

Section IV
Initial Screening

Early identification of students at risk for reading difficulties is critical in developing the appropriate instructional plan. “The best solution to the problem of reading failure is to allocate resources for early identification and prevention.” (Torgesen, 2000). Initial screening is the first step in identifying the students who are at risk for learning difficulties. Initial screening measures consist of short, informal probe(s) given to all students to identify those at risk or at some risk for not meeting grade-level standards. The initial screening of students shall be performed with fidelity and include without limitation (Ark. Code Ann. § 6-41-603):

1. Phonological and phonemic awareness;
2. Sound symbol recognition;
3. Alphabet knowledge;
4. Decoding skills;
5. Rapid naming; and
6. Encoding skills.

Who should be screened? According to Ark. Code Ann. § 6-41-603, a school district shall screen the following:

1. Each student in kindergarten through grade two (K-2);
2. Kindergarten through grade 2 (K-2) students who transfer to a new school and have not been screened;
3. Kindergarten through grade 2 (K-2) students who transfer from another state and cannot present documentation that the student has had similar screening;
4. A student in grade three or higher experiencing difficulty, as noted by a classroom teacher.

Exemptions:

1. Students with an existing dyslexia diagnosis.
2. Students with a sensory impairment such as blindness or a hearing impairment. See Appendix A: Glossary for more information.

The screening components may not be appropriate for students with severe cognitive limitations. It is recommended that school staff work closely with district administrators to determine if the screening is appropriate for each student. Careful consideration must be given to any decision to exclude a student from screening.

A school district shall screen each student in kindergarten through grade two (K- 2) and others required by the Arkansas Department of Education rule using the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) or an equivalent screener. Additional screening assessments will need to be administered to measure components that are not measured by DIBELS or the equivalent screener.

Personnel administering the screener should be trained in the screening tools. School resources and enrollment will influence individual district decisions about who should give and score the screening tools. Because the data will be used to help guide instruction, classroom teachers should participate in screening, scoring, and progress monitoring.

Beginning the fall of 2017, Arkansas public schools will use Istation, NWEA, or Renaissance STAR as their K-2 assessment to meet the requirements of Act 930 of 2017. The purpose of the K-2 assessment is to provide data pertaining to a student's performance levels in reading and mathematics, **not** to meet the requirements of A.C.A. § 6-41-603. However, some products may have subtests or tools that provide information for components required by the dyslexia law. The Educational Service Cooperative (ESC) Dyslexia Specialists can provide support in identifying the strengths and limitations of specific assessment tools. If your school is not affiliated with an ESC, contact the Arkansas Department of Education Dyslexia Specialist.

The performance criteria (i.e. cut-points, benchmarks) should be used to determine if the student is unlikely to achieve reading goals without receiving additional targeted intensive support. While results of the initial screening will likely identify struggling learners, they may not provide all of the information needed to develop an instructional plan, including appropriate interventions. Additional information is needed to pinpoint areas of basic early reading skills that need acceleration. This additional information would be gathered through the Level I Dyslexia Screener.

If the screener under subdivision (a)(1) of the law shows that a student is at risk, or at some risk then a level I dyslexia screener shall be administered (Ark. Code Ann. § 6-41-603). The level I dyslexia screener is described in Section V of the guide.

Initial Screening Tools	
Required Component	**Possible Screening Tools**
Phonological and Phonemic Awareness - the ability to recognize and manipulate the sound system in spoken language	DIBELS: First Sound Fluency (FSF) (K) DIBELS: Phoneme Segmentation Fluency (PSF) (K) AIMSWEB: Phoneme Segmentation Fluency (K) Istation ISIP: Phonemic Awareness (K-1) NWEA Skills Checklist: Phonological Awareness & Phoneme Identification (K) NWEA Skills Checklist: Manipulation of Sounds (K-2) Core Literacy Library: Phoneme Segmentation Test (K-12)
Alphabet Knowledge - the ability to automatically recognize and name the 26 lowercase and 26 uppercase letters with ease and accuracy.	DIBELS: Letter Naming Fluency (LNF) (K-1) AIMSWEB: Letter Naming Fluency (LNF) (K-1) Lakeshore: Alphabet Letter Identification (K-1) NWEA Skills Checklist: Letter Identification (K-2)
Sound Symbol Recognition -to automatically produce sound(s) or grapheme names (grade level letters or letter clusters) during recognition, production, and/or writing tasks.	DIBELS: Nonsense Word Fluency (NWF) Correct Letter Sounds (CLS) (K-2) AIMSWEB: Letter Sound Fluency (K-1) Scholastic: CORE Phonics Survey (K-8) Istation ISIP: Letter Knowledge (K-1) NWEA Skills Checklist: Phonics: Matching Letters to Sounds & Decode: Consonant Blends and Digraphs (K-2)
Decoding Skills - to translate words, word parts, or nonwords into their corresponding pronunciation.	DIBELS: Nonsense Word Fluency (NWF) Whole Words Read (WWR)(K-2) DIBELS: Oral Reading Fluency (ORF) (1-6) AIMSWEB: Nonsense Word Fluency (K-1) FCRR: Oral Reading Fluency Passages (7-12) Ultimate Phonics Reading Test (K-12)
Rapid Naming - the ability to quickly name aloud a series of familiar items	Arkansas Rapid Naming Screener (AR-RAN)(K-2 based on times)(3-12 based on observed behaviors)
Encoding	Word Journeys: Kindergarten Inventory of Spelling (KIDS) (K)

- to translate spoken language into print.	Word Journeys: Developmental Spelling Analysis (DSA) Words Their Way: Primary Spelling Inventory (K-3) Words Their Way: Elementary Spelling Inventory (1-6) Words Their Way: Upper-Level Spelling Inventory (upper elementary, middle, high school, postsecondary) Istation ISIP: Spelling (1-2)

This list of initial screening tools is to be used as a resource for school districts to determine which screener or screeners will provide the most beneficial data for each subcomponent of literacy at each grade level. The Dyslexia Resource Guide Committee is in no way endorsing any of the screeners. The list is in no way all inclusive or to be considered as "approved" screeners.

Screening Options

If a student in K-2 indicates a deficit area on the initial screener, or if a teacher notices a student in grades 3-8 experiencing difficulty, additional screening is required. The additional screening, level I dyslexia screening or level II dyslexia screening, looks more in-depth at the individual components of reading and spelling to determine if the characteristics of dyslexia are present. For K-2 students, a level I screening using curriculum-based measures and/or informal diagnostic inventories or checklists for the required six areas of foundational literacy skills may be sufficient to determine if the child is demonstrating the characteristics of dyslexia.

Bypassing a level I dyslexia screening and proceeding to a level II dyslexia screening for older students could have many benefits. For older students, grades 3 and up, it may be more difficult to find age and grade appropriate curriculum based measures and informal diagnostic inventories or checklists for an accurate identification. Proceeding to a level II dyslexia screening using standardized norm referenced assessments allows a comparison of the student's performance on the individual components to other students the same age and grade. Administering a level II dyslexia screening for an older student, is more efficient use of the student's time and the assessment administrator's time. The level II dyslexia screening data, can provide solid justification for outlining an appropriate 504 service and accommodation plan.

Section V
Level I Dyslexia Screening

If the (initial) screener under subdivision (a)(1) of section 6-41-603 shows that a student is **at risk, or at some risk**, then a level I dyslexia screener shall be administered (Ark. Code Ann. § 6-41-603 (3)(A)). The level I dyslexia screening of a student shall be performed with fidelity and include the components listed under subdivision (a)(2) of this section (Ark. Code Ann. § 6-41-603 (3)). The level I dyslexia screening process shall include documentation of the components of literacy to include but not limited to the following:

1. Phonological and phonemic awareness;
2. Sound symbol recognition;
3. Alphabet knowledge;
4. Decoding skills;
5. Rapid naming; and
6. Encoding skills.

The level I dyslexia screening is a process of gathering additional information that should include progress monitoring data, work samples, formative literacy assessments, parent interviews, teacher questionnaires, early indicator checklists (Appendix D) and additional age and grade appropriate dyslexia screening tools for the six areas. The determination of existing characteristics of dyslexia should be based on multiple sources of data.

A school-based decision-making team should meet to review student records and progress, inform parents of concerns, and obtain parental consent when additional assessments are needed to determine if characteristics of dyslexia exist.

Both Ark. Code Ann. § 6-41-604(a) and Ark. Code Ann. § 6-41-605(a) indicate a determination that a student is exhibiting characteristics of dyslexia and the need for

dyslexia intervention services can be made through a level I dyslexia screening or a level II dyslexia screening.

The Luke Waites Center for Dyslexia and Learning Disorders at Texas Scottish Rite Hospital for Children created the *Characteristic Profile of Dyslexia* to aid in school-based identification of dyslexia. This profile provides five questions to consider when identifying student with characteristics of dyslexia. The questions are

1. Does the student demonstrate one or more of the primary reading characteristics of dyslexia in addition to a spelling deficit?

2. Are the reading and spelling difficulties the result of a phonological processing deficit?

3. Are the reading, spelling, and phonological processing deficits unexpected? Does the student demonstrate cognitive ability to support age-level academic learning?

4. Are there secondary characteristics of dyslexia evident in reading comprehension and written expression?

5. Does the student have strengths that could be assets? Are there coexisting deficits that may complicate identification and the response to intervention and may deserve further assessment and intervention?

The school-based decision-making team may use these five key questions to determine if the student needs dyslexia intervention services. The information gleaned from these questions reflects components of the definition of dyslexia as expressed in Ark. Code Ann. § 6-41-602. If the level I dyslexia screening conducted by the school district indicates a student exhibits characteristics of dyslexia (first three questions answered with a “yes”), the student shall be considered to be exhibiting the

characteristics of dyslexia and should be provided intervention services using a dyslexia program delivered with fidelity.

If a student's performance on an initial screener, level I screening, or level II dyslexia screening under § 6-41-603 indicates a need for dyslexia intervention services, the student's parent or legal guardian shall be:

(1) Notified of the results of the dyslexia evaluation; and

(2) Provided with information and resource material, including without limitation:

(A) The characteristics of dyslexia;

(B) Appropriate classroom interventions and accommodations for students with dyslexia; and

(C) The right of the parent or legal guardian to have the student receive an independent comprehensive dyslexia evaluation by a:

(i) Licensed psychological examiner;

(ii) School psychology specialist;

(iii) Licensed speech-language pathologist;

(iv) Certified dyslexia testing specialist; or

(v) Dyslexia therapist. (Ark. Code Ann. § 6-41-604 (a))

Additional information about the independent comprehensive evaluation can be found in Section VII.

Level I Screening Tools	
Required Component	**Possible Screening Tools**
Phonological and Phonemic Awareness	• CORE Literacy Library: Phonological Awareness Tests (See manual) • Phonological Awareness Skills Screener (PASS) (K-2 & struggling learners) • Phonological Awareness Skills Test (PAST)(Kilpatrick) (PreK - Adult)
Alphabet Knowledge	• Alphabet knowledge is the one component that has a ceiling or mastery level.
Sound Symbol Recognition	• College Station TX, Texas A&M: Quick Phonics Screener (K-6) • Scholastic: CORE Phonics Survey (K-8) • Houghton Mifflin: Phonics/Decoding Screening Test (1-6)
Decoding Skills	• Assessing Multiple Measures: CORE Phonics Survey (K-12) • Really Great Reading: Diagnostic Decoding Surveys (1, 2-12)
Rapid Naming	• Analysis of errors from initial screener
Encoding	• Unedited writing samples and unmemorized dictated spelling

This list of level I dyslexia screening tools is to be used as a resource for school districts to determine which screener or screeners will provide the most beneficial data for each subcomponent of literacy at each grade level. The Dyslexia Resource Guide Committee is in no way endorsing any of the screeners. The list is in no way all inclusive or to be considered as "approved" screeners.

Section VI
Level II Dyslexia Screening

The level II dyslexia screening is a more detailed process for identifying a pattern of strengths and weaknesses documenting the characteristics of dyslexia. The determination of existing characteristics may be based on performance criteria (i.e. cut-points, benchmarks) of the chosen assessments to be used as the level II dyslexia screening. Norm-referenced, diagnostic assessments designed to measure the underlying cause, characteristics, and outcomes should be administered to identify the characteristics of dyslexia. The specific skills to be tested include phonological awareness, rapid naming, word reading, decoding, fluency, spelling, and reading comprehension. Examples of screening tools may be found in Appendix G.

When reporting results of norm-referenced tests, standard scores should be used. Criterion-referenced and group achievement tests scores may be informative as historical or secondary information but are considered weaker dyslexia identification tools. Individual subtest scores should be used rather than composite or cluster scores because a skill is only as strong as the weakest subskill. For example, consider the Elision and the Blending subtest scores on the CTOPP-2 rather than the Phonological Awareness composite score.

The Luke Waites Center for Dyslexia and Learning Disorders at Texas Scottish Rite Hospital for Children created the *Characteristic Profile of Dyslexia* to aid in school-based identification of dyslexia. This profile provides five questions to consider when identifying students with characteristics of dyslexia. The questions are

1. Does the student demonstrate one or more of the primary reading characteristics of dyslexia in addition to a spelling deficit?

2. Are the reading and spelling difficulties the result of a phonological processing deficit?

3. Are the reading, spelling, and phonological processing deficits unexpected? Does the student demonstrate cognitive ability to support age level academic learning?

4. Are there secondary characteristics of dyslexia evident in reading comprehension and written expression?

5. Does the student have strengths that could be assets? Are there coexisting deficits that may complicate identification and the response to intervention and may deserve further assessment and intervention?

The school-based decision making team may use these five key questions to determine if the student needs dyslexia intervention services. The information gleaned from these questions reflects components of the definition of dyslexia as expressed in Ark. Code Ann. § 6-41-602. If the level II dyslexia screening conducted by the school district indicates a student exhibits characteristics of dyslexia (first three questions answered with a "yes"), the student shall be considered to have met the typical profile of a student with dyslexia and should be provided intervention services (Ark. Code Ann. § 6-41-603) using a dyslexia program delivered with fidelity.

If it is determined that the student has functional difficulties in the academic environment due to characteristics of dyslexia, the necessary accommodations or equipment for the student shall be provided under Section 504 of the Rehabilitation Act of 1973 (Ark. Code Ann. § 6-41-603) as they existed on February 1, 2013, if qualified under the applicable federal law. In other words, having a learning problem does not automatically qualify a student for accommodations/equipment under Section 504. The impairment must substantially limit one or more major life activities in order to be considered a disability under Section 504. The determination of substantial limitation must be made on a case-by-case basis with respect to each individual student. The Section 504 regulatory provision at 34 C.F.R. 104.35 (c)

requires that a group of knowledgeable persons draw upon information from a variety of sources in making this determination.

Section VII
Independent Comprehensive Dyslexia Evaluation

A dyslexia diagnosis is not required for a school to provide dyslexia intervention services, however a parent or legal guardian may choose to have an independent comprehensive dyslexia evaluation for the student. Parents are responsible for selecting the qualified individual to perform the comprehensive dyslexia evaluation and must cover the cost. The school district shall consider the diagnosis and provide the student with interventions determined to be appropriate by the school district (Ark. Code Ann. § 6-41-604). Schools should consider all sources of information when determining appropriate services for students. If services are warranted, then interventions will be delivered by a dyslexia interventionist at the school district.

This evaluation must be conducted by Licensed Psychological Examiner, School Psychology Specialist, Licensed Speech Language Pathologist, Certified Dyslexia Testing Specialist, or Dyslexia Therapist (Ark. Code Ann. § 6-41-604 (a)(2)(C)).

This professional should have a knowledge and background in psychology, reading, language education, dyslexia and other related disorders. A thorough working knowledge of how individuals learn to read and why some individuals struggle, and how to plan appropriate interventions is a must. Whether an individual is qualified to conduct an evaluation or provide a diagnosis is dependent upon their licensure.

Section VIII
Instructional Approaches for Students with Dyslexia

Supplemental, intensive reading interventions for students with dyslexia should be individualized and focused on the student's area(s) of primary difficulty. Instruction for students with dyslexia includes a multisensory approach that includes reading, spelling, and writing as appropriate. Components of effective dyslexia intervention include instruction in

- phonemic awareness,
- graphophonemic knowledge,
- the structure of the English language,
- linguistics, language patterns,
- and strategies for decoding, encoding, word recognition, fluency, and comprehension.

Effective interventions also consider the instructional delivery of the intervention. Instructional delivery considerations include

- individualization of the content and supports provided,
- extended time in small group instruction,
- explicit, direct, and systematic instruction,
- multisensory inputs, and
- a focus on meaning-based instruction.

These intensive interventions differ from core instruction in that they are targeted towards the specific skills and components of instruction that are preventing students from making sufficient reading progress. In addition, the instructional delivery provides higher levels of support needed to help students accelerate their reading growth; however, no one remedial reading method works for all dyslexic students.

Students with characteristics of dyslexia should receive an appropriate, specialized dyslexia instructional program that

- is delivered by a professional who has completed training in a specific dyslexia program (Ark. Code Ann. §§ 6-41-602; 6-41-605);

- provides systematic, research-based instruction (Ark. Code Ann. §6-41-602);

- includes instruction that is multisensory addressing two or more sensory pathways during instruction or practice (Ark. Code Ann. §6-41-602); and

- provides instruction in the essential components of reading in a small-group (see definition in Appendix A) or individual setting that maintains fidelity of the program that includes phonemic awareness, graphophonemic knowledge, structure of the English language, linguistic instruction, and strategies for decoding, encoding, word recognition, fluency, and comprehension (Ark. Code Ann. § 6-41-602).

Instructional Delivery

Dyslexia interventionists should provide explicit, direct, systematic and cumulative instruction that is individualized to support learning and focused on meaning. Additional intervention considerations include multisensory instruction to meet student needs.

The Arkansas Department of Education does not approve specific dyslexia programs. It is the responsibility of school district instructional leaders to select a dyslexia program that meets the requirements defined in Ark. Code Ann. § 6-41-602. A sample of a Dyslexia Program Review Form is included in Appendix H.

Section IX
Dyslexia Interventionist

Dyslexia interventionist means a school district or public school employee that is trained in a dyslexia program.

No later than the 2015-2016 academic year, a school district shall have individuals to serve as dyslexia interventionists. Ark. Code Ann. § 6-41-607 (d) School districts may utilize the following personnel who have been trained as dyslexia interventionists: a dyslexia therapist, dyslexia specialist, reading interventionist, certified teacher, tutor or paraprofessional under the supervision of a licensed teacher. The licensed teacher who is supervising the tutor or paraprofessional must be trained in the dyslexia program(s) the district is using.

"Dyslexia therapist" is a professional who has completed training and obtained certification in dyslexia therapy from a dyslexia therapy program defined by the Department of Education.

A "dyslexia specialist" is a professional at each education service cooperative or school district who has expertise and is working towards an endorsement or certification in providing training for phonological and phonemic awareness, sound and symbol relationships, alphabet knowledge, decoding skills, rapid naming skills, and encoding skills. A dyslexia specialist shall be fluent in the Response to Intervention (RTI) process and provide training in administering screening, analyzing and interpreting screening data, and determining appropriate interventions that are systematic, multisensory, and evidence-based. Education service cooperatives must have a dyslexia specialist, but this position is not required for school districts. The ADE will design and facilitate the program of study (professional development) for regional educational service cooperative dyslexia specialists.

Section X
Professional Awareness

Professional awareness is key to early identification. Early interventions for students with dyslexia are dependent on informed and knowledgeable teachers, interventionists, and therapists. The law requires that no later than the 2014-2015 school year, each teacher shall receive professional awareness on:

1. The characteristics of dyslexia; and
2. Evidence-based interventions and accommodations for dyslexia (Ark. Code Ann. § 6-41-608).

The Arkansas Department of Education (ADE) has approved a course offered through ArkansasIDEAS online professional development portal (http://www.arkansasideas.org). This course, *Dyslexia: A Three Part Professional Development*, meets the requirements of the law.

Alternatively, the law allows for professional awareness to be provided through education service cooperatives or at another venue approved by ADE (Ark. Code Ann. § 6-41-608). The teacher should receive written documentation when completing any approved dyslexia professional awareness.

No later than the 2015-16 school year, the Department of Education shall collaborate with the Department of Higher Education to ensure that all teacher education programs at state-supported institutions of higher education provide dyslexia professional awareness of the

1. Characteristics of dyslexia; and
2. Evidence-based interventions and accommodations for dyslexia (Ark. Code Ann. § 6-41-609).

Section XI
Reporting By School Districts

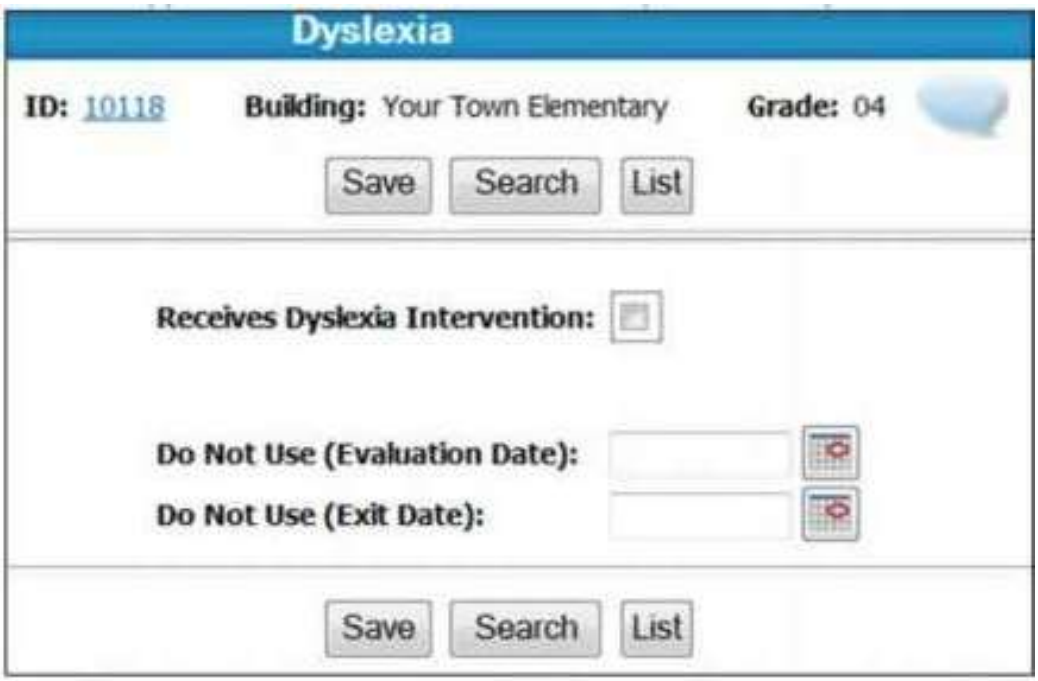
The superintendent of a school district annually shall report the results of the school district screening required under Ark. Code Ann. § 6-41-603.

To meet this requirement school personnel will utilize APSCN eSchoolPlus. A check mark placed in the field “Receives Dyslexia Intervention” indicates the student was screened, demonstrated one or more of the characteristics of dyslexia, and is receiving small group dyslexia intervention services from a trained dyslexia interventionist using the district’s dyslexia intervention program.

Data reporters

Data reporters will flag students receiving dyslexia intervention services through APSCN eSchoolPlus. The information about who to flag will need to be gathered from building level dyslexia interventionists or building level contacts prior to the end of the school year. The individual students can be marked in eSchoolPlus at any time throughout the school year, but the recommendation is that a student is flagged as soon as they start receiving intervention. The data is collected during cycle 7 (June) of each school year. Corrections to the data cannot be made after the data has been pulled.

The menu path to the reporting screen is: Student Center>Medical>Dyslexia screen. The field to update on the Dyslexia screen is “Receives Dyslexia Intervention.” A check mark placed in the field “Receives Dyslexia Intervention” indicates the student was screened, demonstrated one or more of the characteristics of dyslexia, and is receiving small group dyslexia intervention services from a trained dyslexia interventionist using the district’s dyslexia intervention program.



In order to access the dyslexia screen, a user will need the following security resources: reg-maint (read-write) and med-maint-dental (read only). This combination of resources will not allow access to the information within the Medical Center folder.

Required Information to Report on the Website or in Writing

Act 1039 of 2017 amended the provisions of Ark. Code Ann. § 6-41-606 to include an additional reporting requirement. Before July 15, a public school district shall report on the website of the public school district or in writing to the parents of each student in the public school district the following information:

1. The dyslexia intervention programs used during the previous school year that were specifically responsive to assisting students with dyslexia;
2. The number of students during the previous school year who received dyslexia intervention; and
3. The total number of students identified with dyslexia during the previous school year (Ark. Code Ann. § 6-41-606 (b)).

Sample website posting:

Act 1039 of 2017 Reporting By the School District (Ark. Code Ann. § 6-41-606 (b))

Dyslexia Program

During the **20XX-20XX** school year, **Anywhere Public School District** used the evidenced-based **XYZ Dyslexia Intervention Program** in small group intervention to address the deficit areas of students identified as exhibiting the characteristics of dyslexia.

Number of Students Who Received Dyslexia Intervention

During the **20XX-20XX** school year, **## students** attending **Anywhere Public School District received dyslexia intervention services** from a trained dyslexia interventionist.

Total Number of Students Identified as Exhibiting the Characteristics of Dyslexia During the **20XX-20XX** school year, **## students** attending **Anywhere Public School District were identified as exhibiting the characteristics of dyslexia.**

Section XII
Special Education and Dyslexia

A student suspected of having dyslexia or related disorders who is unable to make adequate academic progress may be referred to special education for evaluation and possible identification as a child with a disability within the meaning of IDEA 2004. IDEA 2004 regulations related to specific learning disability (SLD) (34 C.F.R. §300.8(c)(10)(i)) define SLD as a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. IDEA 2004 regulations (34 §CFR 300.309(a)(1)) specifically designate the following areas for the determination of SLD: oral expression, listening comprehension, written expression, basic reading skill, reading fluency skill, reading comprehension, mathematics calculation, and/or mathematics problem solving.

New Referrals

Although dyslexia is not considered one of the 13 eligible disability categories listed in the IDEA 2004 regulations (34 C.F.R. §300.8(c)), a student suspected of having dyslexia or related disorders who is unable to make adequate academic progress may be referred to special education for evaluation and possible identification as a child with a specific learning disability. It should be noted that the referral committee would make the decision as to whether or not an evaluation for special education was warranted and what assessments were needed based on the child's suspected disability. If the referral committee decided against an evaluation for special education, the district would still be required by Ark. Code Ann. § 6-41-601 *et seq.* to screen the student for dyslexia if such screening had not already been conducted.

IDEA 2004 regulations related to assessment (34 C.F.R. §300.304(c)(4)) indicate that a student should be assessed in all areas related to the suspected disability. If a student is evaluated for special education and related services, according to the Arkansas Special Education Eligibility Criteria and Program Guidelines for Children with Disabilities Ages 3-21, Part I Section I, there are three allowable methods for identifying a student as having a Specific Learning Disability:

1. Establishing a severe discrepancy between intellectual ability and achievement;

2. Using a process based on a child's response to scientific, research-based intervention;

3. Using other alternative research-based procedures (such as Patterns of Strengths and Weaknesses).

Office of Special Education and Rehabilitative Services (OSERS) Guidance

The Office of Special Education and Rehabilitative Services (OSERS) issued a Dear Colleague letter on October 23, 2015, to state and local educational agencies. This letter focuses on the "unique educational needs of children with dyslexia, dyscalculia, and dysgraphia, which are conditions that could qualify a child as a child with a specific learning disability under the Individuals with Disabilities Education Act (IDEA)." OSERs clarifies in the letter that "there is nothing in the IDEA that would prohibit the use of the terms dyslexia, dyscalculia, and dysgraphia in IDEA evaluation, eligibility determinations, or IEP documents." State education agencies and local education agencies are encouraged to "consider situations where it would be appropriate to use the terms dyslexia, dyscalculia, or dysgraphia to describe and address the child's unique, identified needs through evaluation, eligibility, and IEP documents." Further, States are encouraged to "review their policies, procedures, and practices to ensure that they do not prohibit the use of the terms dyslexia, dyscalculia and dysgraphia in evaluations, eligibility, and IEP documents."

OSERS provides further clarification, however, that "regardless of whether a child has dyslexia or any other condition explicitly included in this definition of 'specific learning disability', or has a condition such as dyscalculia or dysgraphia not listed expressly in the definition, the LEA must conduct an evaluation in accordance with 34 CFR §§300.304-300.311 to determine whether that child meets the criteria for specific learning disability or any of the other disabilities listed in 34 CFR §300.8, which implements IDEAs definition of a 'child with a disability'."

Finally, States are encouraged to "remind their LEAs of the importance of addressing the unique educational needs of children with specific learning disabilities resulting from dyslexia, dyscalculia, and dysgraphia during IEP Team meetings and other meetings with parents under IDEA."

The ADE joins OSERS in encouraging LEAs to consider the use of these terms, when appropriate, to describe and address a child's unique needs in evaluation, eligibility, and IEP documents. The ADE further encourages LEAs to review their policies, procedures, and practices to ensure that they do not prohibit the use of dyslexia, dysgraphia, and dyscalculia in special education due process paperwork. Finally, the ADE encourages addressing the unique educational needs of children with specific learning disabilities resulting from dyslexia, dyscalculia, and dysgraphia during IEP Team meetings and other meetings with parents under IDEA.

Under Ark. Code Ann. § 6-41-601 et seq., LEAs are required to provide dyslexia intervention services to all students who exhibit the characteristics of dyslexia, including students with IEPs. For students with IEPs, the IEP committee should determine, based on the student's individual needs, the setting where appropriately trained personnel will provide dyslexia intervention. The intervention may be delivered in the general education setting, the special education setting, or in a combination of the two.

Students with existing IEP's

A student who qualifies for special education services is not exempt from dyslexia screening or dyslexia intervention services. According to Acts 1294 and 1268, any student exhibiting characteristics of dyslexia should be provided dyslexia intervention services by a trained dyslexia interventionist in the district's chosen dyslexia program or programs. Rather than starting with initial dyslexia screening, the committee should review existing formal and informal evaluation data to determine if the student exhibits the characteristics of dyslexia. The committee may determine that additional assessments are needed.

Students who qualify for special education have an individual education program (IEP) developed by the IEP committee. The IEP should be developed to address the student's individual needs, including any needs relative to dyslexia. If a student with a disability exhibits the characteristics of dyslexia, the IEP committee would determine whether the student needs special education services in this area, if the student's needs can be met through the district's general education dyslexia intervention program, or if a combination of the two are needed.

Use of IDEA funds for dyslexia services

IDEA Part B funds can be used for dyslexia intervention delivered through the IEP. Additionally, IDEA specifies that a local educational agency (LEA) **may** use up to 15% of its IDEA Part B entitlement for early intervention services for any child in kindergarten through grade 12 who is not currently identified as needing special education or related services but who needs additional academic and behavioral supports to succeed in a general education environment. These funds are to be used as supplementary funds and should not be used to supplant local, state, or other federal program dollars.

Appendix A
Glossary

Accommodation - a change that helps a student overcome or work around a disability. For example, allowing a student who has trouble writing to give his answers orally is an example of an accommodation. The student is still expected to know the same material and answer the same questions as fully as the other students, but he doesn't have to write his answers to show that he knows the information.

Alphabet knowledge - the ability to automatically recognize and name the 26 lowercase and 26 uppercase letters with ease and accuracy.

Characteristics - strengths and weaknesses in the various components of literacy associated with dyslexia. The characteristics are included in the definition of dyslexia as poor decoding, poor word recognition, poor fluency, and poor spelling.

Comprehension - understanding the intended meaning of language.

Core Instruction - the curriculum and instructional practices that are provided to all students in the general education setting.

Cut-point - a score on the scale of a screening tool or a progress monitoring tool. Educators use the cut point to determine whether the student has demonstrated adequate response, whether to administer additional assessments, whether to make an instructional change, and whether to move the student to more or less intensive services.

Decoding - to translate words, word parts, or nonwords into their corresponding pronunciation.

Diagnostic Assessment - assessments used to measure current skills and knowledge, often for the purpose of educational planning.

Differentiated Instruction - varying educational practices to meet the needs of different students.

Dyslexia - a specific learning disability characterized by difficulties with accurate and fluent word recognition, poor spelling and decoding abilities that typically result from the phonological component of language, and are often unexpected in relation to other cognitive abilities.

Elision - the ability to identify the remaining word when a specified sound is deleted.
Encoding - to translate spoken language into print.
Evaluation - procedures used to make judgments or appraisals.
Explicit, Direct Instruction - the overt teaching and modeling of the steps and processes needed to learn and apply new knowledge. Explicit, direct instruction targets the specific needs of the students without presuming prior skills or knowledge.

Fidelity - means the intervention is done as the author of the program intended.

Fluency - the ability to read the words in text effortlessly and efficiently (automaticity) with meaningful expression that enhances the meaning of the text (prosody).

Grapheme - a letter or letter cluster that represents an individual phoneme (i, i-e, igh, ch, tch...).

Graphophonemic Knowledge - refers to the letter - sound plan of English, including knowledge of the relationship between letters and sounds.

Indicator - a sign that shows or suggests the condition of something. Indicators of dyslexia are the early warning signs that indicate a child might have dyslexia. Indicators of dyslexia may differ at different ages.

Individualized Instruction - instruction that is designed to meet the specific needs of the student in a small group setting. Individualized instruction is intensive and highly concentrated instruction that focuses on the student's area(s) of primary difficulty and the instructional delivery necessary to assist students in accelerating their learning, maximizing student engagement in the process of learning.

Individuals with Disabilities Education Act (IDEA) - the law that outlines rights and regulations for students with disabilities in the U.S. who require special education.

Intervention - activities designed to improve or remediate performance in a given area.

Learning disabilities - a disorder in one or more of the basic psychological processes in understanding or using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.

Linguistic Instruction - instruction aimed toward improving student proficiency and fluency with the patterns of language so that words and sentences are carriers of meaning.

Meaning-based Instruction - instruction that is focused on purposeful reading and writing tasks with an emphasis on comprehension and composition.

Morphological Awareness - awareness of the semantically meaningful units and structure of words.

Multisensory Instruction - instruction that incorporates the simultaneous use of two or more sensory pathways (visual, auditory, kinesthetic, and tactile) during teacher presentations and student practice.

Norm-referenced Test - an assessment that provides an estimate of the student's performance compared to other students in the population of the same age or grade.

Orthographic Knowledge - information in memory of how to represent spoken language in a written form.

Phonemic Awareness - enables a student to detect, segment, blend, and manipulate sounds in spoken language

Phonics - a systematic process for teaching sound-symbol relationships and their use in reading and spelling words.

Phonological Awareness - the ability to recognize and manipulate the sound system in spoken language; encompasses the entire continuum of skills related to the awareness of the phonological structure of language.

Progress Monitoring - efficient, frequent, dynamic assessment of targeted skills to examine student growth and examine effectiveness of instruction.

Rapid Naming - or rapid automatized naming (RAN) is the ability to quickly name aloud a series of familiar items (colors, objects, letters, or numbers). Variations in rapid naming time in children provide a strong predictor of their later ability to read. For more information: https://www.understood.org/en/school-learning/evaluations/types-of-tests/rapid-automatized-naming-tests-what-you-need-to-know

Research-based Instruction - instruction that is based on the findings of scientific research.

Response to Intervention - a multi-tiered decision-making process for providing effective instruction and intervention based on students' performance and progress.

Screening Assessment - an efficient assessment given to all students to identify students who are at risk for not meeting grade-level standards.

Sensory impairment - a vision or hearing impairment, or a combination of both, that cannot be corrected to a degree that the student can receive educational benefit from print and/or auditory information.

Small-group - A typical classroom reading group will include a maximum of 5-6 students. If a student exhibiting the characteristics of dyslexia hasn't been successful in the typical small reading group, he or she will likely need a smaller group for the dyslexia intervention. The group size for dyslexia intervention begins with the program guidelines, but should also take into consideration the severity of the reading deficiency and may need to be adjusted based on the individual student's progress monitoring data.

Sound Symbol Recognition - to automatically produce sound(s) or grapheme names (grade level letters or letter clusters) during recognition, production, and/or writing tasks.

Strategy-based Instruction - providing instruction in the step-by-step processes needed for students to independently complete complex tasks.

Structure of the English Language - English language structure consists of morphology (understanding the meaningful roots and affixes that make up words in the language), semantics (understanding how language carries meaning), syntax (understanding the conventions and rules for structuring meaningful sentences), and pragmatics (understanding how language conveys meaning in specific situations)

Systematic Instruction - sequential, cumulative instruction that follows a logical plan and progresses from easiest to most complex with careful pacing to ensure students successfully master each step in the process. Systematic instruction includes scaffolded support for accomplishing each learning step by breaking down complex skills into manageable learning steps and providing temporary supports to control the level of difficulty as students gain mastery.

Vocabulary - words understood and used when listening, speaking, reading, and writing.

Word Recognition - the ability of a reader to recognize written words correctly and effortlessly.

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Appendix C
Definition of Dyslexia

Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge. - Adopted by IDA: November 2002

Characteristics of Dyslexia

Underlying Cause:

- Deficit in the phonological processing (Phonological awareness, phonological memory, and\or rapid naming)

Characteristics:

- Difficulty reading real words in isolation
- Difficulty accurately decoding nonsense or unfamiliar words
- Poor reading fluency (rate, accuracy, labored)
- Poor spelling

Outcomes:

- Difficulty with reading comprehension
- Reduced reading experience that limits vocabulary and background knowledge

Appendix D
Early Indicator Checklist

Family History:

- ❑ Other family members experienced learning problems
  Father, Mother, Sibling(s)

Oral Language:

- ❑ Difficulty understanding verbal directions
- ❑ Difficulty understanding stories read to him/her
- ❑ Difficulty correctly pronouncing phonemes or syllables of words in sequence; persistent baby talk (busgetti for spaghetti, mawn lower for lawn mower, fibe for five)
- ❑ Substitutes words with the same meaning for words in the text he/she can't pronounce, such as "car" for "automobile."
- ❑ Difficulty acquiring new vocabulary
- ❑ Difficulty finding the right words
- ❑ Unable to find the exact word; Speech that is not fluent; Pauses, hesitations when speaking; Lots of "um"s
- ❑ Imprecise language, such as vague references to "stuff" or "things" instead of the proper name of an object
- ❑ Unable to find the exact word; confusing words that sound alike: saying "tornado" instead of "volcano," substituting "lotion" for "ocean," or "humanity" for "humidity"
- ❑ Difficulty speaking in grammatically correct sentences
- ❑ Difficulty explaining ideas or elaborating on thoughts

Phonological Awareness:

- ❑ Difficulty recognizing or producing rhyming words
- ❑ Difficulty isolating sounds in the beginning, final, and/ or medial position
- ❑ Difficulty segmenting individual sounds in a word
- ❑ Difficulty blending sounds into a word

Alphabet:

- ❑ Difficulty learning or recalling the names of letters
- ❑ Difficulty learning or recalling the sounds of letters

Decoding and Word Recognition:

- ❑ Difficulty sounding out unfamiliar or nonsense words
- ❑ Difficulty reading words in isolation (lists)
- ❑ May confuse small words - at - to, said - and, does - goes

Fluency:

- ❑ Difficulty with reading accuracy in context
- ❑ Difficulty reading grade level text at expected rate
- ❑ Difficulty with reading with expression

Spelling:

- ❑ Difficulty memorizing words for spelling tests
- ❑ Difficulty spelling words in context, even after spelling them correctly on a spelling test
- ❑ Difficulty spelling words phonetically

Comprehension:

- ❑ Difficulty with reading comprehension, but not when read to
- ❑ Better understanding of words in context than words isolated in lists

Written Expression:

- ❑ Difficulty constructing sentences
- ❑ Difficulty organizing grade appropriate written compositions
- ❑ Difficulty producing sufficient written output
- ❑ Written expression does not match verbal expression (Content, organization, vocabulary)

Handwriting:

- ❑ Slow with handwriting tasks
- ❑ Overall poor quality/illegible handwriting on written assignment
- ❑ Awkward, fist-like, or tight pencil grip

Cognitive/Academic Ability:

- ❑ The student appears to have intellectual ability equal to or above grade level peers.
- ❑ The student has grade level math calculation skills.
- ❑ The student appears to have grade level math reasoning skills
- ❑ The student has grade level listening comprehension skills.
- ❑ The student has reading difficulties that are unexpected compared to other abilities.
- ❑ The student requires many repetitions to learn something new.
- ❑ Compensates by memorizing stories or words but cannot keep up as demands increase
- ❑ Strength in thinking skills: conceptualization, reason, imagination, abstraction
- ❑ Strength in areas not dependent on reading, such as math, computers, and visual arts, or excellence in more conceptual

Social/Emotional/Behavioral:

- ❑ Shows frustration and anxiety, as he realizes he is lagging behind his peers
- ❑ Exhibits health or behavior problems, emotional difficulties or wants to avoid school
- ❑ Avoids reading aloud

Attention:

- ❑ Difficulty attending to tasks involving print.
- ❑ Difficulty organizing time and materials
- ❑ Is easily distracted
- ❑ Does many things too quickly
- ❑ Is often overactive or fidgety
- ❑ Is inconsistent with production of classwork and homework on written assignments

Student's Academic Development:

- ❑ English is a second language.
- ❑ The student was retained in grade.
- ❑ The student has been/is in special programs. (Special Education, Tiered Interventions, etc.)

Suggested work samples to include:

- ❑ The student's most recent spelling test.
- ❑ A Sample of the student's unedited writing (journal entry, creative story, etc.)
- ❑ The student's most recent progress report or report card.
- ❑ A copy of most recent literacy screeners.

Adapted from Teacher Questionnaire for Dyslexia, Texas Scottish Rite

Appendix E
Accommodations

Listed below are some accommodations to be considered for a student exhibiting the characteristics of dyslexia. Specific accommodations should be selected based on individual student needs.

Reading

- Allow audio books and/or text-to-speech software
- Utilize outlines, summaries
- Preview questions and vocabulary
- Allow shared reading or buddy reading

Writing

- Grade for content rather than spelling
- Allow students to dictate work to an adult
- Substitute alternative projects for written reports
- Utilize speech-to-text software
- Reduce written work
- Minimize copying
- Accept oral responses, reports, and presentations

Testing

- Provide extra time
- Review directions orally
- Read tests orally
- Allow dictated responses

Homework

- Reduce reading and writing requirements
- Limit time spent on homework
- Provide extra time

Instruction

- Break tasks into small steps
- Give directions in small steps
- Give examples and model behavior
- Emphasize daily review
- Provide copies of lecture notes

Classroom

- Post schedules and maintain routines
- Chart assignments on a calendar
- Use color-coding to organize materials and information
- Incorporate multisensory activities
- Coordinate preferential seating
    - Avoid requiring student to read aloud in front of a group.

APPLYING FOR ACCOMMODATIONS ON COLLEGE ENTRANCE TESTS

The application process for individuals planning to enter college can be a daunting experience. For individuals with disabilities who are requesting testing accommodations, this can be even more challenging, as it often requires assembling necessary documentation, completing additional paperwork, and anticipating deadlines. This IDA Fact Sheet gives a broad overview of the process in order to assist individuals who are requesting test accommodations on high stakes tests such as the SAT and ACT. It provides guidance about what forms to submit, how to provide sufficient disability documentation, and how to gather supplemental information if needed to support accommodation requests. Keep in mind that each testing agency sets its own requirements for requesting accommodations.

The Application Process

- Test takers should read the test information on the program's website. Many tests are administered on computer and incorporate functions such as a built-in calculator, clock, etc. Additionally, most testing agencies provide supplemental information or a handbook for test takers with disabilities.
- The testing agency website will give specific information about how to apply for accommodations. This should be read carefully to determine which accommodations are necessary (e.g., additional testing time, or breaks, separate room, a reader, etc.).
- Special Services and/or counseling staff in the student's high school or district may be able to assist in completing the application and acquiring the required documentation.
- Early submission of applications is important, as it's not unusual for testing agencies to request additional scores, updated testing, or clarification, which can cause delays. This is particularly true during peak application periods.
- Once the agency receives an application for accommodations, it may be two months before the applicant is notified. If additional testing or an appeal is needed, all this must be accomplished and submitted at least 60 days in advance of the test date.
- Since most testing agencies no longer "flag" scores obtained under non-standard conditions, it is important to request accommodations that are needed.

Documentation

- Typically, all documentation should be sent in one complete packet. This pertains to supporting documentation (IEP, transcripts, letters re: past accommodations).
- Testing agencies often require current documentation according to their individual "recency" criteria. For example, many testing agencies request documentation for learning disabilities to be dated within the last three to five years to reflect the test taker's need for specific accommodations. Test takers should review the documentation guidelines posted on the website.
- Often, a current, comprehensive evaluation is needed, as an adult version of some tests may be required. For example, most testing agencies will not accept a handwritten prescription-pad note from a doctor. Documentation should be

complete, dated, signed, in English, and on official letterhead. Disability documentation should address all of the following:
    - The existence of an impairment that substantially limits a major life activity, as compared to most people in the general population
    - A diagnosis of the disability and the current impact of impairment and how it limits the student's ability to take the test under standard conditions
    - A rationale for why the requested accommodations are necessary and appropriate. For example, if extra time is requested, the evaluation must say how much extended time should be provided and on what basis.
    - The accommodations that are requested should generally match those provided in the past.
- Some accommodations may not require prior approval, such as braces or crutches, eyeglasses, insulin pump, etc. Lockers that can be accessed during breaks are typically provided for storage of food, water, and/or medication, if applicable.
- If sufficient disability documentation is unavailable or outdated, it may take up to nine months in advance to find a qualified professional with a qualified professional with experience and expertise in diagnosing and documenting the disability in question. That evaluator will need relevant historical information, including:
    - Letters documenting a history of accommodations in school, such as IEPs or 504 plans, or proof of accommodations on statewide assessments.
    - A description of tutoring or coaching services provided in the past.
    - A comprehensive evaluation report for diagnosis of the disability and accommodation determination.
- Additionally, school records from elementary and high school as well as teacher comments will help support a history of a disability. High school transcripts may provide good evidence if they showed the impact of the disability on grades (e.g., dropped classes, withdrawals, incompletes, or failing grades). It is not always the case that accommodations in the past will automatically continue. An ongoing need for accommodations can be described in a personal statement.
- Many colleges and universities with strong school psychology programs perform evaluations at a reduced fee if a private evaluation is not feasible.

Types of Decision Letters

There are three basic types of decision letters that the testing agency sends:

1. **Approval**—This type of letter will list the accommodations that have been approved.
    - Once accommodations have been approved, directions on the approval letter regarding how to schedule the test and other pertinent information.
    - Be aware that extra time may be needed to schedule the test after approval for accommodations. For example, extra time may be needed to secure a reader or scribe.
2. **Request for Additional Information**—This type of letter is not a denial of the request. It specifies that the agency needs more information to complete the review.

3. **Denial**—If the testing agency finds the documentation insufficient to support the accommodation request, this letter will explain the decision and will include options for requesting further review.
    - Appeal Process**:** Each testing agency has established a procedure to allow an appeal of its decision. The information on how to appeal a decision is typically stated in the denial letter or on the agency's website. When the requested information is submitted, the request will be reconsidered.

Preparing for the Test

Whether or not an accommodation request is approved, it is important for the student to become familiar with the upcoming test.

- Most testing agencies have a wide range of practice materials at no or low cost available to test takers.
- Areas of particular focus are the test format, the types of questions used, and the test directions for each type of question. This can reduce the amount of time spent familiarizing oneself with instructions on the test day. Alternate-format practice materials can be requested if this is one of the desired accommodations.
- The sample test questions can be practiced with and without the requested accommodations. The goal is to increase the number of questions correctly completed within the time limit. As you practice, try to increase the number of questions you can complete correctly within the time limit.
- Test sites differ, so it is a good idea to check out the location in advance.

Resources

- **AHEAD** (Association on Higher Education and Disability) This is a professional association committed to full participation of persons with disabilities in postsecondary education. www.ahead.org
- ***Students with Disabilities Preparing for Postsecondary Education: Know Your Rights and Responsibilities*** www2.ed.gov/about/offices/list/ocr/transition.html
- ***Rights and Responsibilities of College Students with LD*** (Learning Disabilities Association of America) https://ldaamerica.org/rights-and-responsibilities-of-college-students-with-learning-disabilities-ld/
- **Educational Testing Service** http://www.ets.org/disabilities
- **ACT Test** website http://www.act.org/content/act/en/products-and-services/the-act/registration/accommodations.html

The International Dyslexia Association (IDA) thanks Loring Brinckerhoff, Ph.D., Nancy Cushen White, Ed.D., BCET, CALT-QI, and Diana Sauter, Ph.D., for their assistance in the preparation of this fact sheet.

Appendix F

Parent Resource: Questions to ask a Diagnostician

When you call, ask:

1. How long have you been testing children for dyslexia?
2. Where did you get trained to do this?
3. What does the term Dyslexia mean to you?
4. Will you use the term Dyslexia in your report? Why or why not?
5. What are some of the tests you will use?
6. What do you charge for testing a child?
7. What is the process like? How long will it take?
8. Will you meet with us when the testing is done and explain the results?
9. Will you be able to refer us to an appropriate and qualified interventionist with experience in performing an evidenced-based program for dyslexia?
10. How do you know the interventionist is qualified?
11. Will you provide a written report as part of your fee? What will be in that report?
12. If my child has dyslexia, will your recommendations section be written with legal terminology that will make it easy to get a 504 Plan?
13. (If the child is in high school) Will your report include recommendations for accommodations for high stakes testing such as extra time for the ACT?
14. Will your report include recommendations for accommodations such as assistive technology to help access reading and writing materials?
15. Will you meet with my child's teacher(s) and explain the results? Is that included in your fee? If not, what would you charge?
16. Can you provide me with a list of references -- parents who have hired you to test their child?

Appendix G
Assembling a Battery for the Level 2: Dyslexia Screener

The Dyslexia Resource Guide cannot be considered a substitute for reading and understanding the manual of a test you are administering.

UNDERLYING CAUSE

PHONOLOGICAL AWARENESS

CTOPP-2 (Comprehensive Test of Phonological Processing-2) Phonological Awareness Composite - Elision, Blending Words and Phoneme Isolation or Sound Matching subtests make up this composite
PAT-2 (Phonological Awareness Test-2) **-** first six subtests
KTEA-3 (Kaufman Test of Educational Achievement - 3rd edition)
WRMT-III (Woodcock Reading Mastery Test III) - Phonological Awareness
WJ-IV (Woodcock-Johnson Tests of Oral Language-4th edition) **-** Segmentation and Sound Blending

RAPID NAMING

CTOPP-2 - Rapid Naming Composite
KTEA-3 - Rapid Automatized Naming, Letter Naming Facility, Object Naming Facility
WRMT-III - Rapid Automatic Naming
WJ-IV Tests of Oral Language - Rapid Picture Naming
RAN/RAS (Rapid Automatized Naming and Rapid Alternating Stimulus)

LETTER KNOWLEDGE

PAT-2 - Graphemes
WRMT-III - Letter Identification
WJ-IV (Woodcock-Johnson Tests of Achievement-4th edition) **-** Spelling of Sounds (Phoneme knowledge)
WIST (Word Identification and Spelling Test) – Sound-symbol knowledge

CHARACTERISTICS

DECODING

PAT-2 - Decoding
KTEA-3 - Nonsense Word Decoding
WIAT-III (Wechsler Individual Achievement Test-3rd edition) - Pseudoword Decoding
WJ-IV Ach - Word Attack
WRMT-III - Word Attack

WORD RECOGNITION

KTEA-3 - Letter & Word Recognition
WIAT-III - Word Reading
WJ-IV Ach - Letter-Word Identification
WRAT-4 (Wide Range Achievement Test-4th edition) **-** Reading
WRMT-III - Word Identification
WIST – Word identification

FLUENCY

Oral Reading Accuracy
GORT-5 (Gray Oral Reading Test-5th edition) **-** Accuracy score

Oral Reading Rate
GORT-5 - Rate score

Oral Reading Fluency (Rate and Accuracy as a Composite only)
KTEA-3 Word Recognition Fluency, Associational Fluency, Silent Reading Fluency
TOWRE-2 (Test of Word Reading Efficiency- 2nd edition) **-** Sight Word Efficiency, Phonemic Decoding Efficiency, and Total Word Reading Efficiency
WIAT-III - Oral Reading Fluency
WJ-IV Ach - Oral Reading Fluency, Sentence Reading Fluency
WRMT-III - Oral Reading Fluency

SPELLING

KTEA-3 – Spelling, Orthographic Processing Cluster - Spelling, Letter Naming Facility, and Word Recognition Fluency
TWS-5 (Test of Written Spelling-5th edition) - Spelling
WIAT-III - Spelling
WJ-IV Ach - Spelling and Spelling of Sounds (spelling nonsense words)
WRAT-4 - Spelling
WIST – Spelling

OUTCOMES

READING COMPREHENSION

GATES (Gates-MacGinitie Reading Tests) **-** Silent reading comprehension
GORT-5 - Oral reading comprehension
GSRT (Gray Silent Reading Tests) - Reading comprehension
KTEA-3 - Reading Comprehension
WIAT-III - Reading comprehension
WJ-IV Ach - Passage Comprehension
WRAT-4 - Sentence Comprehension
WRMT-III - Passage Comprehension

WRITTEN EXPRESSION

KTEA-3 Written Expression
TOWL-3 (Test of Written Language-3rd edition) - Overall writing quotient
WIAT-III - Written Expression
WJ-IV Ach - Writing Samples

Adapted from the Characteristic Profile of Dyslexia – Revised 7/2014, Texas Scottish Rite Hospital for Children

Appendix H
Dyslexia Program Review Form

Program:_____ Author(s):_____

Date of Publication:_____ Intended Age/Grade Range:_____

Length of Program:_____ Group Size:____ Frequency/Duration of Sessions:____

Information Sources:_____

School:_____ Reviewer:_____ Date:_____

Training Requirements:_____ Training Cost:_____

Cost of Materials:_____

Principles of Instruction (How)

Explicit, Direct Instruction

- ❑ Nothing assumed, everything is directly taught
- ❑ Skill or strategy is made clear
- ❑ Modeling, Guided practice, Corrective feedback, Independent Practice

Systematic, Sequential, Cumulative

- ❑ Introductions follow a logical order of the language
- ❑ Begins with easiest, and progresses to more difficult
- ❑ New concept based on previously learned concept
- ❑ Systematic review to strengthen memory

Multisensory

- ❑ Teaching is done using all learning pathways in the brain: (VAKT)
- ❑ Simultaneous in order to enhance memory and learning

Research-Based

- ❑ Instructional techniques that are grounded in research

Small Group Instruction

- ❑ Recommended size of small group _____

Content (What)

Look for lessons that explicitly teach:

Phonemic Awareness

- ❑ Detect
- ❑ Segment
- ❑ Blend
- ❑ Manipulate sounds

Graphophonemic Knowledge

- ❑ Specific sequence of letter-sound introductions
  - ❑ Consonants
  - ❑ Vowels
  - ❑ Consonant digraphs, trigraphs
- ❑ Vowel digraphs, trigraphs, quadrigraphs
  - ❑ Diphthongs
  - ❑ Combinations

Structure of the English Language

- ❑ Syllable types
  - ❑ Closed
  - ❑ Open
  - ❑ Vowel-Consonant-e
  - ❑ Vowel teams
  - ❑ Vowel r
  - ❑ Final Stable Syllables (Consonant le)
- ❑ Syllable division patterns
  - ❑ VCCV
  - ❑ VCV
  - ❑ VCCCV
  - ❑ VV
- ❑ Morphology
  - ❑ Base words
  - ❑ Prefixes
  - ❑ Suffixes
  - ❑ Latin Roots
  - ❑ Greek Combining Forms

Linguistic Instruction

- ❑ Language Form:
  - ❑ Phonology (sounds)
  - ❑ Morphology (meaning)
  - ❑ Syntax (grammar)

- ❑ Language Content: Semantics (vocabulary)

- ❑ Language Use: Pragmatics (conversational rules)

Strategies for:

- ❑ Decoding
- ❑ Word recognition
- ❑ Comprehension
- ❑ Encoding (spelling)
- ❑ Fluency

Appendix I
Record of Modifications to this Document

Since its original release, the Dyslexia Resource Guide has been modified on several occasions. The following list provides a running record of those modifications:

- Appendix I – Revised March 2021
- Sections III, IV, V, XI – Revised December 2017
- Appendix A: Glossary – Revised December 2017
- Section VI: Level II Dyslexia Screening – Revised January 2016
- Appendix G: Assembling a Test Battery for a Level 2 Dyslexia Screener – Revised January 2016
- Appendix H: Programs, Training, and Resources – Removed November 2015
- Section XI: Reporting by School Districts – Revised October 2015
- Section XII: Special Education and Dyslexia – Revised October 2015

Arkansas Outdoor Academy Leadership Structure Outline

AOA Board of Directors

Role:
Serves as the school's governing authority, providing strategic oversight to ensure the mission of outdoor learning, environmental stewardship, and career readiness is fulfilled. Holds the leadership team accountable for performance, compliance, and long-term sustainability.

Executive Leadership Team

Expedition Leader (Superintendent)

Role:
Provides overarching leadership and strategic vision. Coordinates with the Board, develops partnerships, and ensures alignment across all departments.

Direct Reports:

- Base Camp Coordinator (Principal)
- Base Camp Team (Support Staff)
- External Partners

Base Camp Coordinator (Principal)

Role:
Oversees daily school operations and instructional leadership. Ensures alignment of curriculum, staff development, and school climate with the school's mission.

Direct Reports:

- Assistant Principals (Summit Guide & Camp Director)
- Navigators (Teachers)

Summit Guide: Curriculum & Counseling (Assistant Principal)

Responsibilities:

- Oversees all academic programs with a focus on outdoor learning and career-aligned curriculum.
- Supports experiential learning initiatives and project-based instruction.
- Coordinates school counseling, academic testing, and career readiness.

Direct Reports:

- Camp Counselors (School Counselors)
- Testing Navigator
- Internship Coordinator (as applicable)

Camp Director: Behavior & School Culture (Assistant Principal)

Responsibilities:

- Manages positive behavior systems and school culture.
- Serves as primary liaison for families and community partnerships.
- Leads public outreach, events, and media presence.

Direct Reports:

- Safety Scout (CSSO)
- Welcome Rangers (Front Desk Staff)
- Community/Family Engagement Coordinator (if applicable)

Summit Guide and Counseling Director roles.

Responsibilities:

- Designs and implements emotional wellness, mental health, and resilience-building programs.
- Facilitates college and career readiness, internships, and student transitions.

Direct Reports:

- Camp Counselors
- Mental Health Specialists
- Internship Coordinator

Finance Oversight

Finance Manager

Responsibilities:

- Manages budget, payroll, and compliance with financial policies.
- Supports strategic resource allocation and financial transparency.

Direct Reports:

- Finance & Accounting Staff

Collaborative Structures

Advisory Committee

Role:
Supports curricular innovation, field-based learning, and career pathway alignment through input from industry, education, and conservation leaders.

Expedition Leadership Team

Members:

- Expedition Leader
- Base Camp Coordinator
- Summit Guide
- Camp Director

Functions:

- Align schoolwide strategy and leadership initiatives
- Monitor school climate, data, and program impact
- Coordinate community partnerships and whole-school events

Advisory Committee Guide for Arkansas Outdoor Academy Partnership

Purpose of the Advisory Committee

The advisory committee will:

- Provide guidance and expertise to align AOA programs with industry trends and community needs.
- Foster partnerships to enhance the curriculum, internships, and career pathways.
- Advocate for AOA's mission and promote its offerings locally and nationally.

Roles and Responsibilities

Advisory Committee Members

Chairperson

- Leads and facilitates all committee meetings
- Ensures the agenda is followed and meeting objectives are met
- Serves as the primary point of contact between the committee and administration

Vice Chairperson

- Assists the chairperson in their duties
- Leads meetings in the absence of the chairperson
- Supports the coordination of committee activities

Committee Members

- Attend and actively participate in all meetings
- Provide input and feedback on agenda items
- Engage with the school community to gather insights and perspectives
- Support the implementation of committee recommendations

Key Focus Areas

Curriculum Development

- Provide feedback on pathway-specific modules:
    - **Outdoor Conservation Sciences**: Align content with careers in wildlife management, forestry, and ecological monitoring.
    - **Outdoor First Responders**: Validate emergency response scenarios and certifications like Wilderness First Responder (WFR).

    - **Outdoor Tourism and Recreation**: Ensure training in sustainable tourism, hospitality, and trail design meets industry needs.

Partnerships

- Strengthen relationships with:
    - Arkansas State Parks and the Department of Parks and Tourism.
    - Conservation organizations
    - Industry leaders for internships, job placements, and certifications.

Student Support

- Advocate for student leadership development through workshops and mentorship programs.
- Assist in the design of field-based learning experiences, ensuring 50% of learning occurs outdoors.

Meeting Structure

Frequency

- Quarterly meetings (additional sessions as needed).

Agenda Outline

1. **Welcome & Updates**: Chairperson and AOA leadership provide updates on progress.
2. **Curriculum Review**: Evaluate recent course modules and student feedback.
3. **Partnership Development**: Discuss new opportunities and review existing collaborations.
4. **Action Plan**: Assign responsibilities and set deadlines for initiatives.
5. **Open Forum**: Address member questions or concerns.
6. **Closing**: Summarize decisions and outline next steps.

Operational Guidelines

Decision-Making

- Decisions will be made by consensus, with the Chairperson mediating unresolved issues.

Communication

- Members will use a shared platform for document collaboration and updates.

- Meeting minutes and action items will be distributed within a week of each meeting.

Evaluation

- Annually assess the group's impact on AOA's goals using metrics like:
    - Number of partnerships established.
    - Student enrollment in pathways.
    - Certification and internship completion rates.

Long-Term Vision

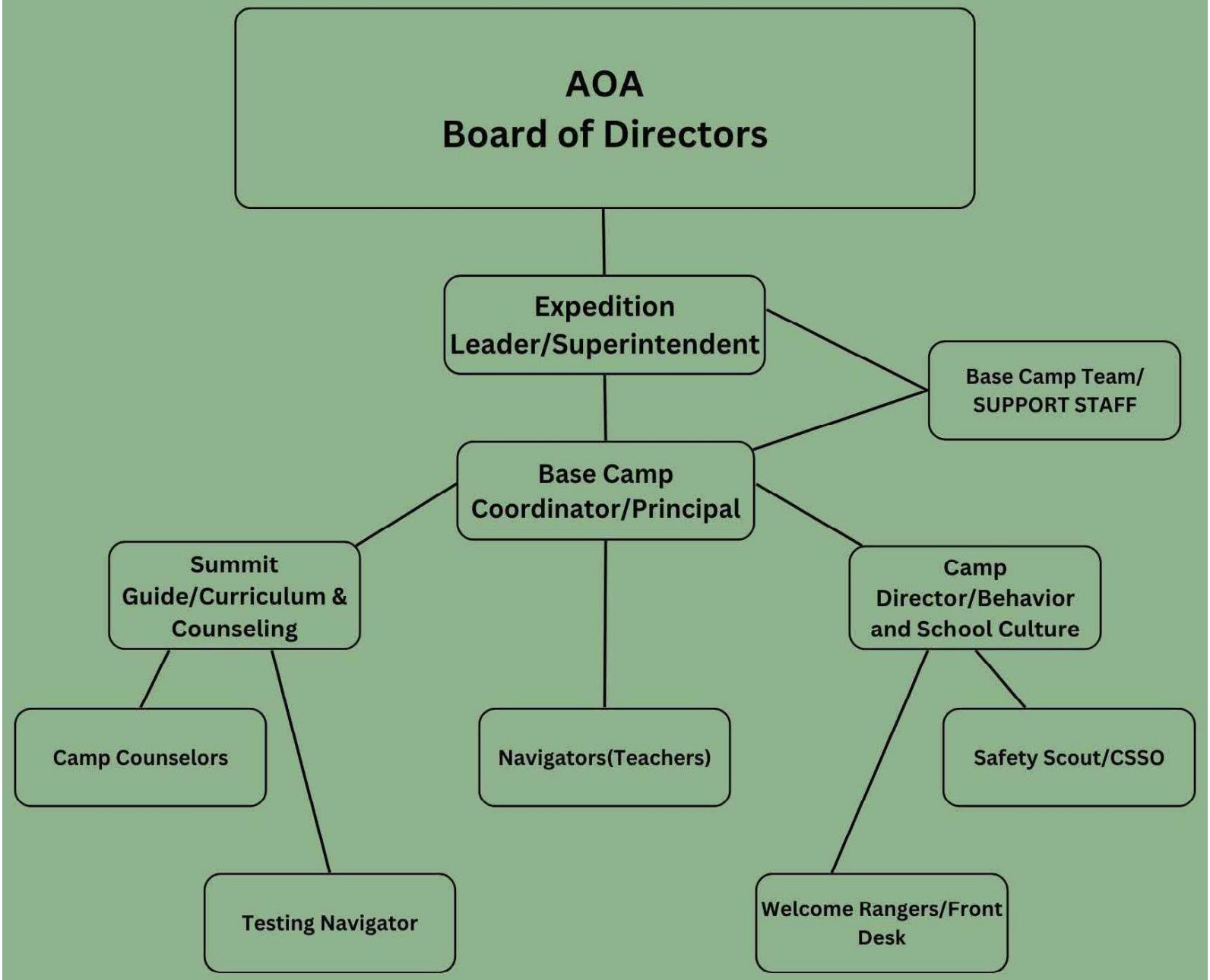
Year 1–5 Goals

- Develop scalable programs aligned with AOA's five-year curriculum plan.
- Achieve state/national recognition by contributing to sustainable tourism and conservation education.
- Support AOA graduates in securing industry certifications and employment opportunities.

Beyond Year 5

- Expand partnerships to include national organizations.
- Advocate for AOA's curriculum as a model for outdoor education nationwide

Arkansas Outdoor Academy Organizational Chart



WAIVERS

Complete the following tables indicating all sections of Title 6 of the Arkansas Code Annotated, the Division of Elementary and Secondary Education rules, and the Standards for Accreditation of Arkansas Public Schools and School Districts from which the public charter school seeks to be exempted to meet the goals of the school.

Please use the wavier list provided below. This list includes the appropriate waiver topic and citations to the applicable Arkansas Code Section, Rules, and Standards to fully effectuate the requested waiver.

Each of your waiver requests must include a rationale. Failure to provide a rationale will result in your application being marked as incomplete.

Waiver #1 Topic	Teacher Licensure
Arkansas Code Annotated	Ark. Code Ann. § 6-17-309
Standard for Accreditation	Standard 1-C: Qualified Personnel
ADE Rules	ADE Rule 1.03 – Licensure Exceptions
Rationale for Waiver	Allows hiring outdoor experts (e.g., park rangers, ecotourism leaders) with real-world experience

Waiver #2 Topic	Class Size & Teaching Load
Arkansas Code Annotated	Ark. Code Ann. §§ 6-17-812, 6-17-111
Standard for Accreditation	Standard 1-A: Class Size Flexibility
ADE Rules	ADE Rule 10.02 – Teaching Load & Class Size
Rationale for Waiver	Enables mixed-age, cohort-based outdoor learning and expeditionary instruction

Waiver #3 Topic	School Calendar & Instruction Time
Arkansas Code Annotated	Ark. Code Ann. §§ 6-10-106, 6-16-102
Standard for Accreditation	Standard 2-D: Instructional Time
ADE Rules	ADE Rule 14.03 – Calendar & Days
Rationale for Waiver	Facilitates block or seasonal schedules that support immersive outdoor programs

Waiver #4 Topic	Personnel Policy (Planning Time, Pay)
Arkansas Code Annotated	Ark. Code Ann. §§ 6-17-201, 6-17-114, 6-17-117
Standard for Accreditation	Standard 4-B: Personnel Policies
ADE Rules	ADE Rule 3.06 – Planning, Duty-Free Time
Rationale for Waiver	Allows creation of part-time or seasonal instructional roles tied to industry schedules

Waiver #5 Topic	Counseling & Library Media Specialist
Arkansas Code Annotated	Ark. Code Ann. §§ 6-18-1005, 6-25-103
Standard for Accreditation	Standard 3-C: Library/Media Services
ADE Rules	ADE Rule 16.02 – Counseling Requirements
Rationale for Waiver	Replaces traditional library/media with mobile tech, field guides, and digital learning tools

Waiver #6 Topic	Bus Color & Community Shuttle Model
Arkansas Code Annotated	Ark. Code Ann. § 6-19-107
Standard for Accreditation	Standard 5-A: Safe & Equitable Transportation Access
ADE Rules	ADE Transportation Rules – Bus Color & Safety Standards
Rationale for Waiver	Allows use of AOA-branded buses operating only on two limited routes with five designated community stops each; not used for traditional home pickup routes

Waiver #7 Topic	
Arkansas Code Annotated	
Standard for Accreditation	
ADE Rules	
Rationale for Waiver	

Waiver #8 Topic	
Arkansas Code Annotated	
Standard for Accreditation	
ADE Rules	
Rationale for Waiver	

Waiver #9 Topic	
Arkansas Code Annotated	
Standard for Accreditation	
ADE Rules	
Rationale for Waiver	

Waiver #10 Topic	
Arkansas Code Annotated	
Standard for Accreditation	
ADE Rules	
Rationale for Waiver	

Waiver Topic Names with Arkansas Code Annotated, Standards, and DESE Rules (when applicable)

178 Instructional Days – standard only Standard 1-A.4.1	**Acquisition of Commodities** Ark. Code Ann. § 6-21-303	**Adopt School Calendar** Ark. Code Ann. § 6-10-106	**Alternative Learning Environment (ALE)** Ark. Code Ann. §§ 6-15-1005(b)(5) 6-18-503(a)(1)(C)(i) 6-48-102 6-48-103 DESE Rules Governing Student Special Needs Funding – Section 4 Standard 2-I.1	**Arkansas History** Ark. Code Ann. §§ 6-16-124(a)(2) 6-17-418 6-17-703 Standard 1-A.1.2.8
Attendance Ark. Code Ann. § 6-18-213(a)(2)	**Board of Directors** Ark. Code Ann. §§ 6-13-608 6-13-611 6-13-612(c) 6-13-613 6-13-615 6-13-616(a) 6-13-617 6-13-618 6-13-619(a), (c), (d)(1)(A), (d)(4) 6-13-620(5) 6-13-622(b) 6-13-630 6-13-631 6-13-634 6-13-635 6-13-1303 6-14-101, et seq.	**Body Mass Index (BMI) Assessment** DESE Rules Governing Nutrition and Physical Activity and Body Mass Index for Age Assessment Protocols in Arkansas Public Schools, Section 5.02.5, 12.00	**Class Size & Teaching Load** Ark. Code Ann. § 6-17-812 Standard 1-A.5 (Class Size) Standard 1-A.6 (Teaching Load) DESE Rules Governing Class Size and Teaching Load	**Classified Employee Minimum Salary** Ark. Code Ann. §§ 6-17-2201, et seq. 6-17-2403
Clock Hours Standard 1-A.2	**Comprehensive School Counseling Program & School Counselor** Ark. Code Ann. §§ 6-18-2002(2)(A) 6-18-2003(a)(2)(A) Standard 4-E.1, 4-E.2	**Credit for College Courses** Ark. Code Ann. § 6-18-223	**Curriculum – Advanced Placement Courses** Ark. Code Ann. §§ 6-16-1203(a) 6-16-1204(a), (c), and (d)	**Curriculum – Career & Technical Education** Standard 1-A.1.2.7 (5-8) 1-A.1.3.9 (9-12)

			DESE Rules Governing Grading and Course Credit – Sections 4-1.00 & 6.00 Standard 1-A.1.3-10	
Curriculum – Concurrent Credit Ark. Code Ann. §§ 6-16-1203(b) 6-16-1204(b) and (e) DESE Rules Governing Grading and Course Credit – Sections 5.00	**Curriculum – CPR** Ark. Code Ann. § 6-16-143 Standard 1-C.2.5 Under Ark. Code Ann. § 6-23-401(b) this is NOT waivable unless the charter is fully virtual.	**Curriculum – Fine Arts** Standard 1-A.1.1.5 (K-4) 1-A.1.2.5 (5-8) 1-A.1.3.6 (9-12)	**Curriculum – Foreign Language 9-12** Standard 1-A.1.3.5	**Curriculum – Visual Art or Music** Ark. Code Ann. §§ 6-16-130(a) – elementary 6-16-130(b) – grades 7-8 and some 6th grade DESE Rules Governing Visual Art and Music Standard 1-A.1.1.5, 1-A.1.2.5, & 1-A.1.3.6
Eye and Vision Screening Ark. Code Ann. §§ 6-18-1501 6-18-1502 DESE Rules Governing Eye & Vision Screening Report in Arkansas Public Schools	**Financial Management – Business Manager** Ark. Code Ann. § 6-15-2302(b) DESE Rule Governing the Arkansas Fiscal Assessment and Accountability Program – Section 12	**Flag Display** Ark. Code Ann. §§ 6-16-105 6-16-106	**Flexible Schedule** Ark. Code Ann. § 6-16-102, except (a)(5)	**Food Services** Ark. Code Ann. §§ 6-18-705 (breakfast program) 6-20-701, et seq. (school lunch program) DESE Rules Governing Nutrition and Physical Activity and Body Mass Index for Age Assessment Protocols in Arkansas Public Schools Standard 3-D.1
Gifted and Talented Ark. Code Ann. §§ 6-20-2208(c)(6) 6-42-109 DESE Rules Governing Gifted and Talented Program Approval Standards Standard 2-G.1	**Grading Scale** Ark. Code Ann. § 6-15-902(a) DESE Rules Governing Grading and Course Credit – Section 2-2.01	**Health Services – School Nurse** Ark. Code Ann. § 6-18-706	**Health and Safety Services** Standard 2-E.1, 2-E.2	**Instructional Day (includes delay/early release of school and recess)** Ark. Code Ann. §§ 6-16-102 6-10-126 – Delay or early release of school due to emergency circumstances Standards 1-A.4.2 1-A.4.3 (Recess)

Instructional Materials Ark. Code Ann. § 6-21-413 DESE Rules Governing Instructional Materials – Sections 5.01, 5.01.2	**Leased Academic Facilities** Ark. Code Ann. § 6-21-117(2)-(5) Standard 6-A.1, 6-A.2	**Library Media Services – includes standard for balance of instructional materials** Ark. Code Ann. § 6-25-103 Standard 2-D.1	**Library Media Specialist** Ark. Code Ann. § 6-25-104 Standard 4-F.1, 4-F.2	**Maintain School Facilities** Standard 6-A.1
Parent & Family Engagement Plan Ark. Code Ann. § 6-15-1701, et seq. DESE Rules Governing Parental Involvement Plans and Family and Community Engagement Standard 5-A.1	**Period of Silence** Ark. Code Ann. § 6-10-115	**Personnel Policies – Classified Employees Personnel Policies** Ark. Code Ann. §§ 6-17-2301(c) 6-17-2301(c)(1) & (d)(2) 6-17-2302 6-17-2303 6-17-2304 6-17-2305	**Personnel Policies – Committee on Personnel Policies** Ark. Code Ann. §§ 6-17-203 6-17-205 6-17-209	**Personnel Policies – Daily Planning Period** Ark. Code Ann. § 6-17-114
Personnel Policies – Duty-Free Lunch Period Ark. Code Ann. § 6-17-111	**Personnel Policies – Employment of Licensed Personnel** Ark. Code Ann. § 6-17-301	**Personnel Policies – Grievance Procedure** Ark. Code Ann. §§ 6-17-208 6-17-210	**Personnel Policies – Non-instructional Duties** Ark. Code Ann. § 6-17-117	**Personnel Policies – Personnel Policies Incorporated into Teacher Contracts** Ark. Code Ann. § 6-17-204
Personnel Policies – Public School Employees' Fair Hearing Act Ark. Code Ann. §§ 6-17-1701, et seq.	**Personnel Policies – Requirements** Ark. Code Ann. § 6-17-201(a) & (c)	**Personnel Policies – Right to Join Professional Organization** Ark. Code Ann. § 6-17-202	**Personnel Policies – School Employees' Minimum Sick Leave** Ark. Code Ann. §§ 6-17-1301, et seq.	**Personnel Policies – Teachers' Minimum Sick Leave** Ark. Code Ann. §§ 6-17-1201, et seq.
Personnel Policies – Teachers' Fair Dismissal Act Ark. Code Ann. §§ 6-17-1501, et seq.	**Personnel Policies – Teacher Excellence and Support System (TESS)** Ark. Code Ann. §§ 6-17-2801, et seq. DESE Rules Governing Educator Support and Development	**Personnel Policies – Use of Personal Leave** Ark. Code Ann. § 6-17-211	**Personnel Policies – Website Requirements** Ark. Code Ann. § 6-11-129 DESE Rules Governing Documents Posted to School District and Education Service Cooperative Websites – Sections 5&6	**Physical Education** Ark. Code Ann. § 6-16-132 DESE Rules Governing Nutrition and Physical Activity and Body Mass Index for Age Assessment Protocols in Arkansas Public Schools – Sections 7.01, 7.01.1, 7.01.1.1, 7.01.1.2, 7.01.3, 7.09 Standards 1-A.1.1.6, 1-A.1.2.6, & 1-A.1.3.8

Pledge of Allegiance Ark. Code Ann. § 6-16-108	**Principal** Ark. Code Ann. § 6-17-302 Standards 4-C.1, 4-C.2	**Professional Development** Ark. Code Ann. §§ 6-17-703 6-17-704 6-17-705 DESE Rules Governing Professional Development Standard 4-G.1	**Report Cards** Ark. Code Ann. § 6-15-903(a)(2)	**Required Instruction K-4** Standard 1-A.1.1
Required Instruction 5-8 Standard 1-A.1.2	**Required Instruction 9-12** Standard 1-A.1.3	**Salaries and Compensation** Ark. Code Ann. §§ 6-17-807 6-17-812 6-17-908 6-17-2401 et seq. 6-21-303(b)	**School Calendar – School Start Date** Ark. Code Ann. § 6-10-106	**School Counselor** Standard 4-E.1 & 4-E.2
School Property and Supplies – Rules Ark. Code Ann. § 6-21-303(b)	**School Safety Policies & Procedures** Standard 6-A.2	**Statewide Assessment System** Ark. Code Ann. § 6-15-2907 Under Ark. Code Ann. § 6-23-401(b) this is NOT waivable.	**Written Student Discipline Procedures** Ark. Code Ann. 6-18-503(b)(2) DESE Rules Governing Student Discipline and School Safety, 4.11	**Superintendent** Ark. Code Ann. §§ 6-13-109 6-17-427 DESE Rules Governing the Superintendent Mentoring Program Standard 4-B.1, 4-B.2
Teacher Excellence & Support System (TESS) Ark. Code Ann. §§ 6-17-2801, et seq. DESE Rules Governing Educator Support and Development	**Teacher Licensure** Ark. Code Ann. §§ 6-15-1004 6-17-309 6-17-401 6-17-418 6-17-902 6-17-908 6-17-919 DESE Rules Governing Educator Licensure – Section 7 Standard 4-D.1	**Teachers' Salaries – 12-mo. Contract for Vocational Agri Teachers** Ark. Code Ann. § 6-17-802	**Tornado & Earthquake Safety Drills** Ark. Code Ann. § 6-10-121 Under Ark. Code Ann. § 6-23-401(b) this is NOT waivable unless the charter is fully virtual.	Transportation Ark. Code Ann. §§ 6-19-101, et seq.

Waiver Justification Chart

Outdoor-Focused, LEARNS-Aligned Charter Model

Waiver	Statutory Reference	Standard for Accreditation	ADE Rules	LEARNS Act Alignment	Innovative Application	Certified Teacher Partnership
Teacher Licensure	Ark. Code Ann. § 6-17-309	Standard 1-C: Qualified Personnel	ADE Rule 1.03 – Licensure Exceptions	Expands access to career-ready instruction through professionals in high-wage, high-growth fields (LEARNS §4(c))	Allows hiring outdoor experts (e.g., park rangers, ecotourism leaders) with real-world experience	Professionals collaborate with certified educators to align with LEARNS standards and ensure academic rigor
Class Size & Teaching Load	Ark. Code Ann. §§ 6-17-812, 6-17-111	Standard 1-A: Class Size Flexibility	ADE Rule 10.02 – Teaching Load & Class Size	Supports flexible and interdisciplinary environments (LEARNS §7)	Enables mixed-age, cohort-based outdoor learning and expeditionary instruction	Licensed teachers guide content delivery and assessment across all learning cohorts
School Calendar & Instruction Time	Ark. Code Ann. §§ 6-10-106, 6-16-102	Standard 2-D: Instructional Time	ADE Rule 14.03 – Calendar & Days	Promotes scheduling innovation for internships and fieldwork (LEARNS §5)	Facilitates block or seasonal schedules that support immersive outdoor programs	Curriculum aligned to state standards through certified instructional planning
Personnel Policy (Planning Time, Pay)	Ark. Code Ann. §§ 6-17-201, 6-17-114, 6-17-117	Standard 4-B: Personnel Policies	ADE Rule 3.06 – Planning, Duty-Free Time	Encourages alternative roles to recruit	Allows creation of part-time or seasonal	Certified teachers oversee and support

				industry professionals (LEARNS §3)	instructional roles tied to industry schedules	consistent instructional quality
Counseling & Library Media Specialist	Ark. Code Ann. §§ 6-18-1005, 6-25-103	Standard 3-C: Library/Media Services	ADE Rule 16.02 – Counseling Requirements	LEARNS fosters customized guidance and modern resources (LEARNS §2 & §6)	Replaces traditional library/media with mobile tech, field guides, and digital learning tools	Certified counselors ensure students meet all academic planning and SEL needs
Bus Color & Community Shuttle Model	Ark. Code Ann. § 6-19-107	Standard 5-A: Safe & Equitable Transportation Access	ADE Transportation Rules – Bus Color & Safety Standards	Supports place-based learning with a limited, centralized shuttle system rather than full home-to-school routes; increases operational efficiency and community visibility (LEARNS §5)	Allows use of AOA-branded buses operating only on two limited routes with five designated community stops each; not used for traditional home pickup routes	Drivers and routes will comply with safety standards; equipment, markings, and oversight remain intact despite color branding

	A				B				C				D				E				F		
Step	Salary	$ Increase	% Increase	Step	Salary	$ Increase	% Increase	Step	Salary	$ Increase	% Increase	Step	Salary	$ Increase	% Increase	Step	Salary	$ Increase	% Increase	Step	Salary	$ Increase	% Increase
0	$50,000.00	N/A	N/A	0	$53,000.00	N/A	N/A	0	$57,000.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	$50,905.00	$905.00	1.81%	1	$53,959.30	$959.30	1.81%	1	$58,031.70	$1,031.70	1.81%	1	$60,000.00			1	$75,000.00	N/A	N/A	1	$80,000.00	N/A	N/A
2	$51,826.38	$921.38	1.81%	2	$54,935.96	$976.66	1.81%	2	$59,082.07	$1,050.37	1.81%	2	$61,086.00	$1,086.00	1.81%	2	$76,357.50	$1,357.50	1.81%	2	$81,448.00	$1,448.00	1.81%
3	$52,764.44	$938.06	1.81%	3	$55,930.30	$994.34	1.81%	3	$60,151.46	$1,069.39	1.81%	3	$62,191.66	$1,105.66	1.81%	3	$77,739.57	$1,382.07	1.81%	3	$82,922.21	$1,474.21	1.81%
4	$54,219.47	$1,455.04	2.76%	4	$57,442.64	$1,512.34	2.70%	4	$61,740.20	$1,588.74	2.64%	4	$63,317.33	$1,125.67	1.81%	4	$79,146.66	$1,407.09	1.81%	4	$84,423.10	$1,500.89	1.81%
5	$55,200.85	$981.37	1.81%	5	$58,482.35	$1,039.71	1.81%	5	$62,857.70	$1,117.50	1.81%	5	$64,963.37	$1,646.04	2.60%	5	$81,079.21	$1,932.55	2.44%	5	$86,451.16	$2,028.06	2.40%
6	$56,199.98	$999.14	1.81%	6	$59,540.89	$1,058.53	1.81%	6	$63,995.42	$1,137.72	1.81%	6	$66,139.21	$1,175.84	1.81%	6	$82,546.75	$1,467.53	1.81%	6	$88,015.92	$1,564.77	1.81%
7	$57,217.20	$1,017.22	1.81%	7	$60,618.58	$1,077.69	1.81%	7	$65,153.74	$1,158.32	1.81%	7	$67,336.33	$1,197.12	1.81%	7	$84,040.84	$1,494.10	1.81%	7	$89,609.01	$1,593.09	1.81%
8	$58,252.83	$1,035.63	1.81%	8	$61,715.77	$1,097.20	1.81%	8	$66,333.02	$1,179.28	1.81%	8	$68,555.11	$1,218.79	1.81%	8	$85,561.98	$1,521.14	1.81%	8	$91,230.94	$1,621.92	1.81%
9	$59,807.21	$1,554.38	2.67%	9	$63,332.83	$1,617.06	2.62%	9	$68,033.65	$1,700.63	2.56%	9	$69,795.96	$1,240.85	1.81%	9	$87,110.65	$1,548.67	1.81%	9	$92,882.22	$1,651.28	1.81%
10	$60,889.72	$1,082.51	1.81%	10	$64,479.15	$1,146.32	1.81%	10	$69,265.06	$1,231.41	1.81%	10	$71,559.27	$1,763.31	2.53%	10	$89,187.36	$2,076.70	2.38%	10	$95,063.38	$2,181.17	2.35%
11	$61,991.82	$1,102.10	1.81%	11	$65,646.22	$1,167.07	1.81%	11	$70,518.76	$1,253.70	1.81%	11	$72,854.49	$1,295.22	1.81%								
12	$63,113.88	$1,122.05	1.81%	12	$66,834.42	$1,188.20	1.81%	12	$71,795.15	$1,276.39	1.81%	12	$74,173.16	$1,318.67	1.81%								
13	$64,256.24	$1,142.36	1.81%	13	$68,044.12	$1,209.70	1.81%	13	$73,094.64	$1,299.49	1.81%	13	$75,515.69	$1,342.53	1.81%								
14	$65,919.27	$1,663.04	2.59%	14	$69,775.72	$1,731.60	2.54%	14	$74,917.65	$1,823.01	2.49%	14	$76,882.52	$1,366.83	1.81%								
15	$67,112.41	$1,193.14	1.81%	15	$71,038.66	$1,262.94	1.81%	15	$76,273.66	$1,356.01	1.81%	15	$78,774.10	$1,891.57	2.46%								
16	$68,327.15	$1,214.73	1.81%	16	$72,324.46	$1,285.80	1.81%	16	$77,654.21	$1,380.55	1.81%	16	$80,199.91	$1,425.81	1.81%								
17	$69,563.87	$1,236.72	1.81%	17	$73,633.54	$1,309.07	1.81%	17	$79,059.76	$1,405.54	1.81%	17	$81,651.53	$1,451.62	1.81%								
18	$70,822.98	$1,259.11	1.81%	18	$74,966.30	$1,332.77	1.81%	18	$80,490.74	$1,430.98	1.81%	18	$83,129.42	$1,477.89	1.81%								
19	$72,604.87	$1,781.90	2.52%	19	$76,823.19	$1,856.89	2.48%	19	$82,447.62	$1,956.88	2.43%	19	$84,634.06	$1,504.64	1.81%								
20	$73,919.02	$1,314.15	1.81%	20	$78,213.69	$1,390.50	1.81%	20	$83,939.92	$1,492.30	1.81%	20	$86,665.94	$2,031.88	2.40%								

A	Teacher (BA), SpEd Teacher (+Stipend), Nurse
B	Teacher (MA), SpEd Teacher (+Stipend)
C	Teacher (PhD), SpEd Teacher (+Stipend)
D	Counsellor
E	Assistant Principal
F	Principal

Arkansas Outdoor Academy

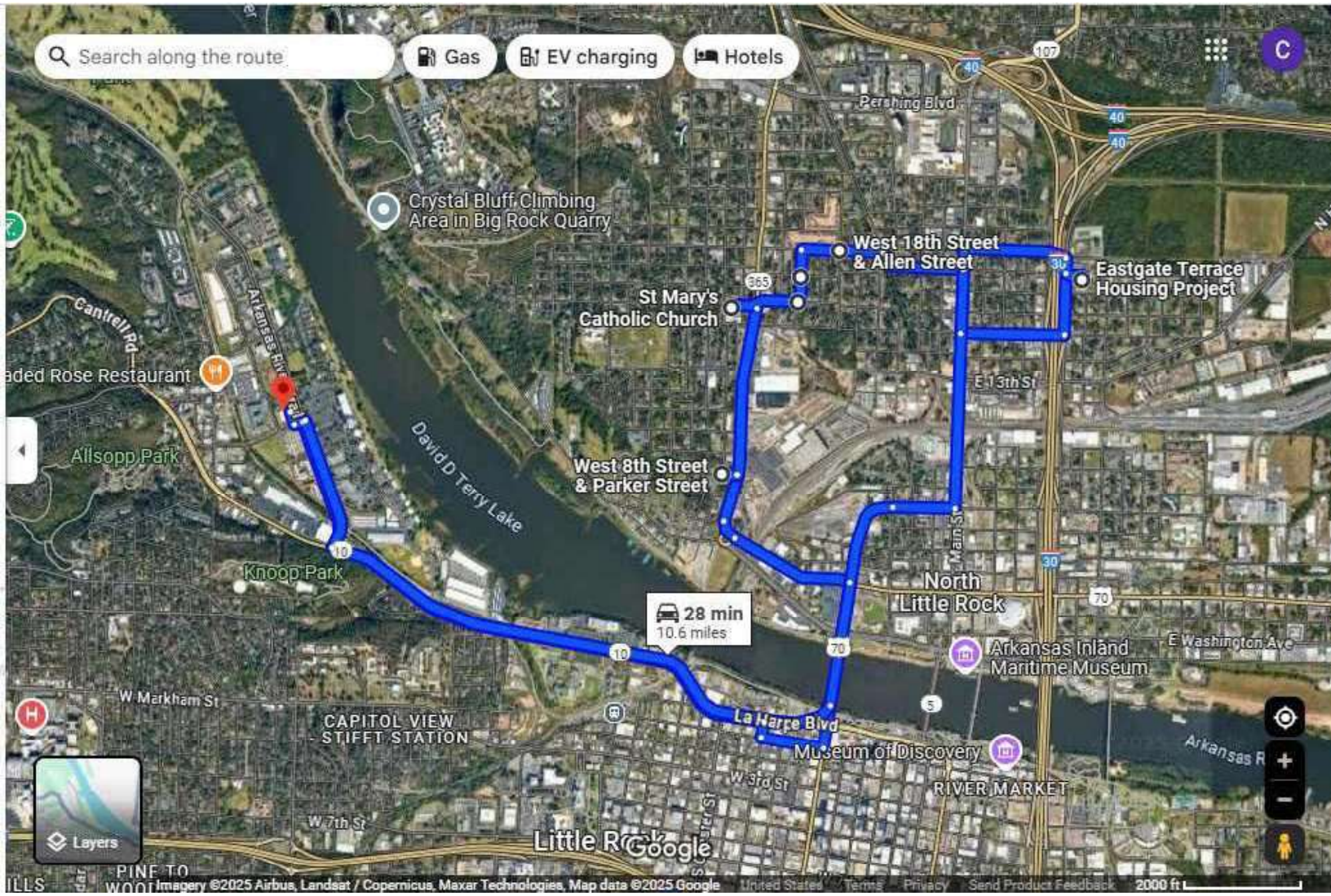
		Yr 1	Yr 2	Yr 3
	6	75	75	75
	7	75	75	75
	8	75	75	75
	9	75	75	75
	10		75	75
	11			75
	12			
Total Enrollment		300	375	450
Funding per student				
Foundation Funding		$8,100	$8,343	$8,593
ELL Funding		$375	$386	$398
Professional Development Funding		$37.50	$37.50	$37.50
Enhanced Student Achievement Funding		$1,103	$1,136	$1,170
NSLA Funding/Lunch		$1,130	$1,164	$1,199
Title I,II, III, and IV Funding		$33	$107	$110
Foundation Funding		$2,430,000	$3,128,625	$3,866,981
ELL Funding		$18,750	$19,313	$19,892
Professional Development Funding		$11,250	$14,063	$16,875
Enhanced Student Achievement Funding		$330,900	$426,034	$526,578
NSLA Funding/Lunch		$339,000	$436,463	$539,468
Title I,II, III, and IV Funding		$10,000	$40,000	$49,500
Total revenue		$3,139,900	$4,064,496	$5,019,293
Salaries & Benefits		$1,630,000	$2,098,625	$2,593,901
Facilities (building)		$285,182	$451,609	$623,472
Utilites		$75,000	$77,250	$79,568
Technology		$75,000	$96,563	$119,351
Professional services		$285,000	$285,000	$285,000
Professional Development		$11,250	$14,063	$16,875
Health Services		$5,000	$5,150	$5,305
Transportation		$50,000	$64,375	$79,568
Outdoor Programs/Gear		$100,000	$125,000	$150,000
Special Education		$200,000	$250,000	$300,000
Classroom Instruction/Curriculum		$102,500	$128,125	$153,750
Food Services		$250,000	$312,500	$375,000
Total Expenses		$3,068,932	$3,908,259	$4,781,788

Net Income	$70,968	$156,237	$237,504
Ratio Analysis			
Net Income Available for Debt Service	$356,150	$607,846	$860,976
Debt Service coverage Ratio	1.25	1.35	1.38
Debt Burden	9%	11%	12%
Salary Burden	52%	52%	52%

Service Category	Estimated Annual Cost	Notes
Legal Services	15000	Board counsel, compliance, contract review
Audit & Accounting	70000	Annual audit, payroll services
HR & Staffing Services	25000	Recruitment, benefits, HR compliance
IT Support & Network Services	40000	Help desk, network maintenance
Curriculum & Instructional Design	30000	Curriculum design and assessments
Facilities & Operations Consulting	0	Lease negotiation, operations setup
Grant Management & Development	10000	Grant writing and development strategy
Marketing & Communications	25000	Branding, outreach, website
Translation & SPED/504 Consulting	20000	Special education, translation compliance
Insurance	50000	
Total	285000	

Position	Number of Staff (Min)	Number of Staff (Max)	Founders Stipend	Starting Salary for Certified	Contracted School Days
Principal	1	1	1,000 after year one	All Teaching Staff starting 50,000	153-160
Assistant Principal	2	2	1,000 each year up to 5 to 10 years if budget allows	**Bachelors**	
Counselor		1		50,000 year 1 (year 2+ additional money TBD)	
Administrative Assistant		1	**SPED Stipend:**	**Master's**	
Superintendent	1	1	2,000	53,000 year 1 (year 2+ additional money TBD)	
IT Support		1		**Non-certified teachers working towards certification**	
Nurse	1	1		Max 3 years to recieve cerifiication	
Accountant		1			
SPED Teacher	1	1		**Classified Salary**	
Paraprofessional		2		Accountant/Finance	60,000
ELA Teacher	3	4		HR	Contracted ?
Math Teacher	3	4		Paraprofessional	30,000
Science Teacher	3	4		Nurse	50,000
Social Studies	3	4		IT Specialist	60,000
Art Teacher	1	1		Office Manager/PR(Social Media)	50,000
Music Teacher	1	1		Front Office/Attendance Secretary	$20 per hour
Physical Education Teacher	1	1		Facilities Coordinator	60,000
Human Resources		1		Counselor	60,000
Foreign Language	1	1		Principal	80,000
				Assistant Principal	75,000
				Superintendent	85,000

Estimated Budget for AOA Year 1				
Superindendent	1		$85,000.00	
Principal	1		$80,000.00	
Assistant Principal	2		$150,000.00	
Counselor		60000		
Facilities Coordinator		50000		
IT Support		50000		
Nurse	1		$50,000.00	
Accountant		60000		
SPED Teacher	0.5		$55,000.00	
Paraprofessional		30000		
ELA Teacher	3		$165,600.00	
Math Teacher	3		$165,600.00	
Science Teacher	3		$165,600.00	
Social Studies	3		$165,600.00	
Art Teacher	0.5		$55,200.00	
Music Teacher	0.5		$55,200.00	
Physical Education Teacher	0.5		$55,200.00	
Human Resources		60000		
Foreign Language	1		$55,200.00	
Office Manager/PR(Social Media)	1		$60,000.00	
Administrative Assistant				
Facilities (building)			$285,182.00	
Utliites			$75,000.00	
Technology			$75,000.00	
Professional Development			$11,250.00	
Health Services			$5,000.00	
Transportation			$50,000.00	
Outdoor Programs/Gear			$100,000.00	
Special Education			$200,000.00	
Classroom Instruction/Curriculum			$102,500.00	
Food Services			$250,000.00	
Total			$2,933,260.00	
Possible State Funding Per Pupil				
Per student		300		
$8100 (Foundation)		2,430,000		
$375 (ELL) (50 students)		18750		
$37.50 (PD)		11250		
$1103 (Enhanced Student Achieving)		330,900		
$1130 (NSLA Funding/Lunch)		339,000		
Title I,II, III, and IV Funding		10000		
		3,139,900		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Gas
EV charging
Hotels
Crystal Bluff Climbing Area in Big Rock Quarry
West 18th Street & Allen Street
Eastgate Terrace Housing Project
St Mary's Catholic Church
Pershing Blvd
E 13th St
Cantrell Rd
Arkansas River Trail
aded Rose Restaurant
Allsopp Park
David D Terry Lake
West 8th Street & Parker Street
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Main St
North Little Rock
28 min
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Arkansas Inland Maritime Museum
E Washington Ave
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CAPITOL VIEW - STIFFT STATION
La Harpe Blvd
Museum of Discovery
RIVER MARKET
W 3rd St
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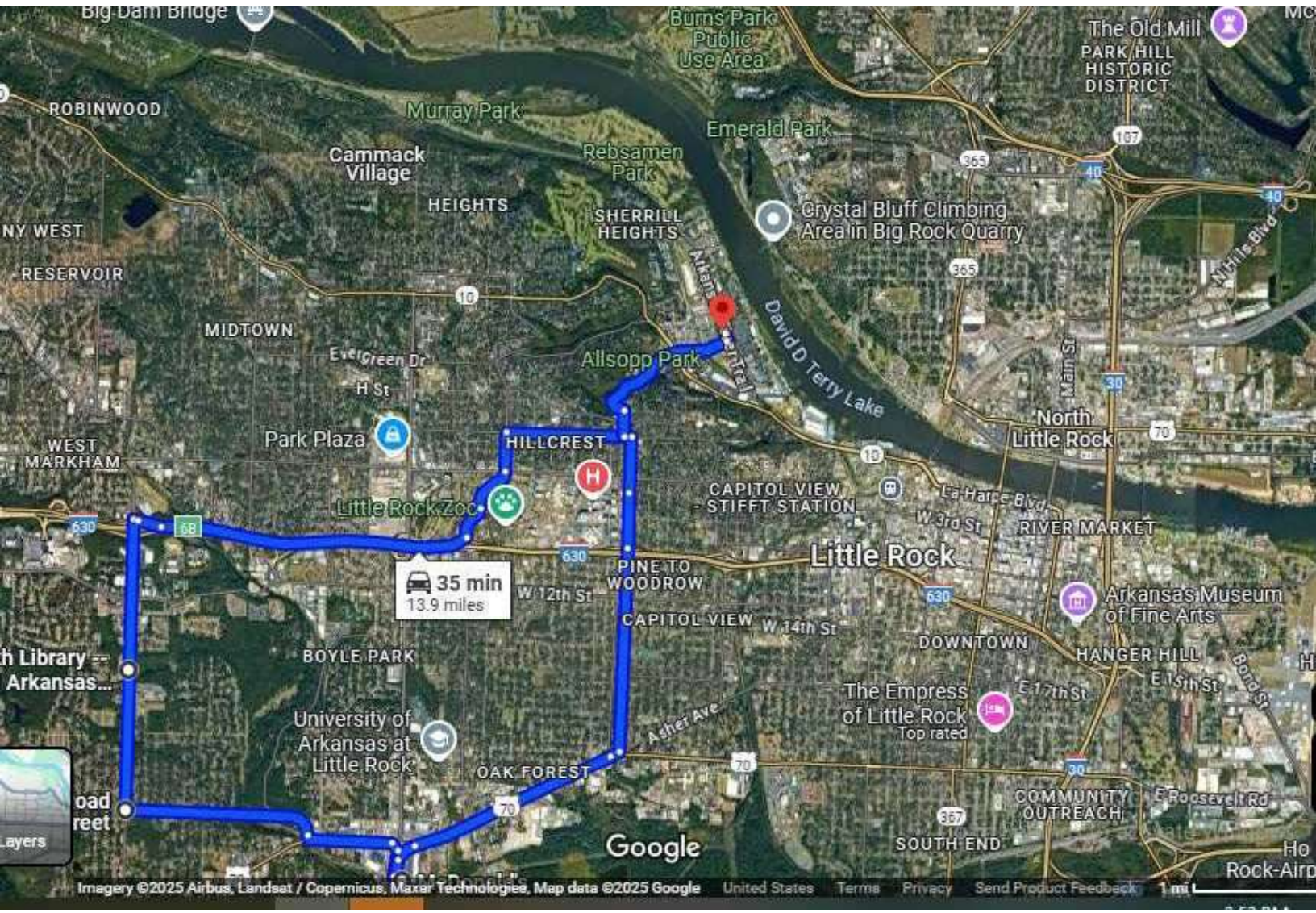
Big Dam Bridge
Burns Park Public Use Area
The Old Mill
PARK HILL HISTORIC DISTRICT
ROBINWOOD
Murray Park
Emerald Park
Cammack Village
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HEIGHTS
SHERRILL HEIGHTS
Crystal Bluff Climbing Area in Big Rock Quarry
NY WEST
RESERVOIR
MIDTOWN
Evergreen Dr
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Allsopp Park
David D Terry Lake
Main St
North Little Rock
Park Plaza
HILLCREST
WEST MARKHAM
Little Rock Zoo
CAPITOL VIEW - STIFFT STATION
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RIVER MARKET
Little Rock
35 min
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W 12th St
PINE TO WOODROW
CAPITOL VIEW
W 14th St
Arkansas Museum of Fine Arts
DOWNTOWN
HANGER HILL
BOYLE PARK
The Empress of Little Rock
Top rated
E 17th St
E 15th St
University of Arkansas at Little Rock
Asher Ave
OAK FOREST
COMMUNITY OUTREACH
E Roosevelt Rd
SOUTH END
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Outdoor Learning Costs and Considerations

Equipment & Materials for Outdoor Instruction

To deliver a high-quality, outdoor-integrated curriculum, AOA will invest in durable materials suitable for all seasons and learning activities.

- Fieldwork Kits (measuring tapes, clipboards, GPS units, hand lenses, weather sensors)
    - Estimated startup: $500–$1,000 per kit/classroom
- Outdoor Science & STEM Materials (soil/water testing kits, microscopes, solar panels)
    - Estimated annual replenishment: $3,000–$7,500
- Gear for Teachers & Students (tarps, waterproof clipboards, storage tubs, rain gear loaners)
    - Estimated startup: $7,500–$10,000

Staff Training and Safety

Outdoor learning demands additional training in supervision, risk mitigation, and environmental education:

- Professional Development in Outdoor Instruction
    - Annual budget: $5,000–$8,000 for team trainings, certifications (Project WILD, Leave No Trace, CPR/First Aid)
- Risk Management Protocols
    - Weather monitoring systems
    - Emergency action plans for outdoor excursions

Seasonal and Climate Considerations

AOA is located in a region with hot summers, wet springs, and mild winters. Planning ensures that outdoor instruction remains safe and effective year-round:

- Schedule Adjustments: Mornings used for outdoor activities in warmer months; indoor rotations during storms or extreme heat.
- Shelter Access: Every outdoor space will be within a 2–3 minute walk from indoor shelter or covered area.
- Clothing Equity: Loaner gear (jackets, boots, hats) available to ensure all students can participate regardless of economic background.

Transportation for Off-Site Outdoor Learning

AOA will engage students in off-campus fieldwork and environmental projects beginning Year 1. Costs include:

- Entry Fees & Permits (state parks, outdoor labs, public land use)
    - Estimated annual cost: $2,000–$4,000

AOA will pursue partnerships with state and local agencies (e.g., Arkansas Game & Fish, Audubon Society) to reduce costs through fee waivers or collaborative programming.

Maintenance & Sustainability

To maintain quality and safety over time:

- Annual Inspections & Repairs: Outdoor structures and equipment will undergo formal review each summer.
    - Maintenance Reserve: $5,000 annually
- Student Stewardship Model: Environmental service and site maintenance are built into student projects, reducing labor costs and reinforcing ownership of the learning environment.

Contingency Plan: Under-Enrollment, Delayed Funding & Reserve Fund Strategy

Arkansas Outdoor Academy

To ensure uninterrupted operations and fiscal resilience in its early years, Arkansas Outdoor Academy (AOA) has adopted a contingency plan that addresses risks associated with under-enrollment and delayed state or federal funding, anchored by a dedicated reserve fund strategy.

1. Foundational Budgeting Assumptions

- AOA's annual budgets are built using minimum enrollment projections (not anticipated or maximum enrollment).
- No essential functions (e.g., salaries, facilities, academic programming) rely on variable income such as grants, donations, or fundraising.
- Budgets include only guaranteed revenue sources, such as state foundation funding, SPED allocations, and transportation reimbursements.

2. Reserve Fund Strategy

To prepare for funding interruptions or unexpected costs, AOA will maintain a designated Operating Reserve Fund with the following specifications:

A. Reserve Fund Purpose

- Ensure continuity of operations during temporary revenue disruptions.
- Support emergency responses to events such as delayed payments, facility issues, or economic downturns.
- Provide a cushion for enrollment-related funding shortfalls in the early years of operation.

B. Reserve Fund Target

- Maintain 5%–10% of the total annual operating budget in unrestricted reserves at all times.
- In Year 1, this reserve will be funded through start-up capital and will grow as annual revenue increases.

C. Fund Use Policy

- Reserve funds may be used only with Board approval, except in critical emergencies requiring immediate action by the Superintendent with retroactive board reporting.
- Permissible uses include:
    - Payroll during revenue delays
    - Facility repairs or safety-related needs
    - Utility costs or essential vendor payments
    - Costs associated with short-term enrollment drops

D. Replenishment Plan

- Any drawdown from the reserve fund will trigger a Board-approved replenishment timeline, typically within 6–12 months.
- Replenishment may occur through:
    - Budget reallocations
    - Year-end savings
    - Carryforward from unspent funds

3. Under-Enrollment Contingency Actions

If student enrollment falls below minimum budget targets (e.g., <200 students in Year 1):

A. Tiered Staffing Implementation

- Only essential instructional and support staff will be hired initially.
- Elective teachers, paraprofessionals, and non-core positions will be hired in phases as enrollment levels are confirmed.

B. Discretionary Spending Adjustments

- Delay or cancel optional purchases (e.g., non-essential technology, enrichment programs, extra-curriculars).
- Re-negotiate vendor contracts based on actual student numbers (e.g., food service, transportation).

C. Scenario-Based Budgeting

- Leadership will develop alternative budget scenarios ("Plan A/B") by July each year.
- If enrollment falls short by the first 10-day count, a modified budget will be presented to the board for approval.

4. Delayed Funding Contingency Actions

If disbursement of public funds is delayed:

A. Reserve Fund Utilization

- The Operating Reserve Fund will be the first line of protection, covering all critical costs without borrowing or disruption.

B. Spending Freeze

- Temporary halt on non-essential expenditures (PD, travel, new contracts, supplies) until funding is received.

C. Short-Term Liquidity Access

- AOA will establish a line of credit or revolving loan agreement with a community financial institution.
    - Used only if reserve levels are inadequate or timing requires liquidity beyond 60 days.
    - Terms will be reviewed annually by the Finance Committee.

5. Oversight & Transparency

- Monthly finance committee meetings will review cash flow, enrollment trends, and fund balance.
- Quarterly reporting to the Board includes reserve levels, contingency actions (if triggered), and budget-to-actuals.
- Annual independent audit will verify reserve compliance and fiscal health.
- Reserve fund levels and usage will be posted in public financial summaries in accordance with Ark. Code Ann. §6-23-306.

Student Services and Special Populations

Arkansas Outdoor Academy (AOA) is committed to identifying, evaluating, and appropriately placing students with disabilities in the most inclusive and effective learning environments. The school will ensure that all special education (SPED) services are delivered in accordance with the Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act, and Arkansas Department of Education guidelines. AOA's educational model integrates inclusive practices into both indoor and outdoor learning spaces, ensuring that students with exceptional needs have full access to meaningful instruction and support.

Staffing Structure for Student Support Services

In Year 1, AOA will staff a dedicated and scalable student services team, including:

- **Full-Time Special Education Coordinator**
  Oversees compliance, evaluations, IEP development, service delivery, and acts as the primary liaison with families and agencies.
- **SPED Teacher**
  Provide both push-in and pull-out services, co-plan with general education staff, and support outdoor and indoor instruction.
- **ELL/ESL Specialist**
  Delivers structured English language development and sheltered instruction aligned to WIDA standards.
- **Part-Time Gifted & Talented Liaison**
  Coordinates differentiation for advanced learners and Individualized Learning Plans (ILPs).
- **Paraprofessionals**
  Support Tier 2/3 interventions, mobility assistance, and behavioral/sensory needs, indoors and outdoors.
- **Counselors and Mental Health Staff**
  Deliver trauma-informed, behavioral coaching, and family support services.

Identification and Evaluation Process

AOA will implement a proactive Child Find system to locate, identify, and evaluate all students who may have a disability:

- Universal Screenings conducted at enrollment and periodically during the year using academic, behavioral, and SEL benchmarks.

- Referral Process that allows teachers, parents, or staff to initiate formal SPED evaluations at any time.
- Early Childhood Collaboration with local agencies to support smooth transitions for students entering from early intervention programs.
- Multilingual Family Communication to ensure access and understanding for all families throughout the process.

Evaluation Timeline & Procedure

All evaluations will follow state-mandated timelines and incorporate multiple data sources:

- **Within 10 days of a signed referral:** Evaluation plan developed
- **Within 60 calendar days**: Full comprehensive evaluation completed
- **Within 30 days**: IEP meeting held if student is found eligible

Evaluations will be multidisciplinary and culturally responsive, incorporating classroom data, standardized assessments, outdoor learning observations, and family input.

Eligibility Determination & IEP Development

For each student found eligible for special education services:

- A personalized Individualized Education Program (IEP) will be developed that addresses both academic and functional needs.
- Supports will reflect the dual nature of AOA's setting, including:
    - Outdoor-specific accommodations, such as mobility tools, sensory stations, or adaptive materials
    - Instructional supports, such as visual aids, chunking, and alternate formats
    - Related services (speech, OT/PT, counseling) integrated into the natural learning environment where appropriate

IEPs will be designed by a Multidisciplinary Evaluation Team and reviewed annually.

Placement in the Least Restrictive Environment (LRE)

AOA will ensure that all students with disabilities are placed in the least restrictive environment appropriate for their individual needs:

- **General Education with Accommodations**: Most students will learn alongside their peers in both classroom and outdoor settings.

- **Push-In Services**: SPED staff will provide support directly within general education and field-based instruction.
- **Pull-Out Services**: Used when students have therapy services or other needed supports they are required to have.
- **Specialized Outdoor Instruction**: Nature-based therapy or adaptive field learning for students needing structured environments.

MTSS & SPED Referrals

AOA's Multi-Tiered System of Supports (MTSS) is designed to address academic and behavioral challenges early and systematically. However:

- MTSS will never be used to delay or deny a special education referral.
- Staff will be trained to recognize when a student's needs warrant evaluation, regardless of current Tier level.
- Referrals may be initiated by educators, parents, or service providers at any time and will follow IDEA timelines independently of MTSS.

Related Services: Delivery & Compliance

AOA will coordinate with licensed providers and regional education cooperatives to ensure full delivery of required services:

- **Speech-Language Therapy**: Delivered by certified SLPs both indoors and in structured outdoor settings.
- **Occupational/Physical Therapy (OT/PT)**: Delivered weekly on-site, with adaptations for outdoor implementation when appropriate.
- **Mental Health Counseling**: Offered by certified professionals through both IEP services and MTSS tiered supports.

All related services will be tracked using a SPED management platform (e.g., eSchool), with ongoing documentation of:

- Service minutes
- Goal progress
- Communication logs

Annual IEP reviews and triennial reevaluations will ensure compliance and appropriate placement.

Supports for Students with Complex Needs

AOA is fully committed to serving students with significant academic, behavioral, or physical needs. The school will:

- Develop Individualized Risk or Safety Plans as needed
  Ensure access to ADA-compliant trails, sensory zones, shaded and quiet regulation areas
- Provide 1:1 or 2:1 staffing ratios when determined necessary by the IEP team
- Offer daily check-ins, behavioral coaching, and SEL support
- Engage families and care teams in the development of Behavior Intervention Plans (BIPs), Functional Behavior Assessments (FBAs), or medical care plans

All students will be supported in ways that maintain their dignity, access, and ability to participate fully in AOA's outdoor, hands-on curriculum.

Family Engagement and Procedural Safeguards

AOA believes that families are essential partners in the success of students with disabilities. As such:

- Parents will be included at every stage of the identification, evaluation, and placement process
- All procedural safeguards will be provided in the family's preferred language
- AOA will offer training workshops and advocacy resources to support informed family participation
- The SPED Coordinator will serve as the central liaison for concerns, mediation, or due process if needed

Compliance Oversight

To maintain high levels of compliance and accountability:

- The SPED Coordinator will lead monthly compliance checks, internal audits, and data reviews
- The governing board will receive regular updates on service delivery, evaluations, and any disputes

All records will be maintained in secure digital systems and regularly reviewed for fidelity

Blocks	Time A	Time B	Minute	There are two alternatives to the daily/weekly schedule that are being considered
1st	7:45-9:25	8:00-9:40	100	
2nd	9:35-11:15	9:50-11:30	100	
Lunch 1	11:15-11:45	11:30-12:00	30	
3rd	11:45-1:25	12:00-1:40	100	
4th	1:35-3:15	1:50-3:30	100	
Seminar	3:25-4:05	3:40-4:25	40	
Dismissal	4:05-4:30	4:25-4:45	20	
Teacher Times	7:30 - 5:00		9.5	
Student Times	8:00 - 4:28			
Total Ed Minutes			440	

	Outdoors	Indoor	Outdoors	Indoor
Time Block	**Tuesday (6th)**	**Wednesday (6th)**	**Thursday (6th)**	**Friday (6th)**
8:00 – 9:40 (Block 1)	Science (Weather Lab - Outdoors)	Science (Indoor)	Science (Watershed Walk - Outdoors)	Science (Lab & Wrap-up)
9:50 – 11:30 (Block 2)	Social Studies	Specials	Social Studies	Specials
11:30 – 12:00 (Lunch)	Lunch	Lunch	Lunch	Lunch
12:00 – 1:40 (Block 3)	Math (Field Data/Graphing)	Math (Geometry Application)	Math (Ratios in Nature)	Math (Assessment/Project)
1:50 – 3:30 (Block 4)	ELA (Narrative Writing)	ELA (Reading & Response)	ELA (Conservation Persuasion)	ELA (Research Writing)
3:40 – 4:25 (Seminar)	Advisory – Journaling	Clubs / SEL	Peer Sharing / Reflection	Community Circle
4:25 – 4:45 (Dismissal)	Dismissal Prep	Dismissal Prep	Dismissal Prep	Dismissal Prep

	Outdoors	Indoor	Outdoors	Indoor
Time Block	**Tuesday (7th)**	**Wednesday (7th)**	**Thursday (7th)**	**Friday (7th)**
8:00 – 9:40 (Block 1)	Science (Outdoor Observation)	Science (Classroom Analysis)	Science (Watershed Field Trip)	Science (Wrap-up & Presentation)
9:50 – 11:30 (Block 2)	Social Studies	Specials	Social Studies	Specials
11:30 – 12:00 (Lunch)	Lunch	Lunch	Lunch	Lunch
12:00 – 1:40 (Block 3)	Math (Trail Mapping)	Math (Proportional Reasoning)	Math (Data Modeling)	Math (Review)
1:50 – 3:30 (Block 4)	ELA (Adventure Narratives)	ELA (Research Skills)	ELA (Environmental Argument)	ELA (Assessment Writing)
3:40 – 4:25 (Seminar)	Planning & Study Skills	Team-Building	Outdoor Debrief	Goal Reflection
4:25 – 4:45 (Dismissal)	Dismissal Prep	Dismissal Prep	Dismissal Prep	Dismissal Prep

	Indoor	Outdoor	Indoor	Outdoor
Time Block	**Tuesday (8th)**	**Wednesday (8th)**	**Thursday (8th)**	**Friday (8th)**
8:00 – 9:40 (Block 1)	Social Studies (Indoor)	Social Studies (Outdoor – Field-Based)	Specials (Indoor)	Specials (Outdoor)
9:50 – 11:30 (Block 2)	Math (Indoor)	Math (Outdoor – Geometry Applications)	Math (Indoor – Probability, Risk Planning)	Math (Outdoor – Field-Based Data Use)
11:30 – 12:00 (Lunch)	Lunch	Lunch	Lunch	Lunch

12:00 – 1:40 (Block 3)	ELA (Indoor)	ELA (Indoor – Narrative/Research)	ELA (Indoor – Policy Writing)	ELA (Indoor – Writing Lab)
1:50 – 3:30 (Block 4)	Science (Indoor)	Science (Outdoor – Ecology Lab)	Science (Indoor – Environmental Chemistry)	Science (Outdoor – Project Work)
3:40 – 4:25 (Seminar)	Advisory / Goal Setting	Career/CTE Focus	SEL & Clubs	Pathway Planning
4:25 – 4:45 (Dismissal)	Dismissal Prep	Dismissal Prep	Dismissal Prep	Dismissal Prep
	Indoor	Outdoor	Indoor	Outdoor
Time Block	**Tuesday (9th)**	**Wednesday (9th)**	**Thursday (9th)**	**Friday (9th)**
8:00 – 9:40 (Block 1)	Social Studies (Indoor)	Social Studies (Outdoor – Field-Based)	Specials (Indoor)	Specials (Outdoor)
9:50 – 11:30 (Block 2)	Math (Indoor)	Math (Outdoor – Geometry Applications)	Math (Indoor – Probability, Risk Planning)	Math (Outdoor – Field-Based Data Use)
11:30 – 12:00 (Lunch)	Lunch	Lunch	Lunch	Lunch
12:00 – 1:40 (Block 3)	ELA (Indoor)	ELA (Indoor – Narrative/Research)	ELA (Indoor – Policy Writing)	ELA (Indoor – Writing Lab)
1:50 – 3:30 (Block 4)	Science (Indoor)	Science (Outdoor – Ecology Lab)	Science (Indoor – Environmental Chemistry)	Science (Outdoor – Project Work)
3:40 – 4:25 (Seminar)	Advisory / Goal Setting	Career/CTE Focus	SEL & Clubs	Pathway Planning
4:25 – 4:45 (Dismissal)	Dismissal Prep	Dismissal Prep	Dismissal Prep	Dismissal Prep

Grade	Subject	Teaching Tools **EXAMPLE** (Indoor Days)	Outdoor Toolkit **EXAMPLE** (Outdoor Days)	**All Teacher kits will include first aid kits and other items as season dictates**
6th	Science	Twig or another (HQIM) Science platform, models, slide decks, microscopes, hand lenses	Clipboard, nature journal, thermometer, soil test kit, band-aids, sunscreen, bug spray,	
6th	Math	Math manipulatives, graphing paper, whiteboards, McGraw-Hill Math Print/Digital	Measuring tape, field data sheets, compass, pencils, hydration pack, sunhat, emergency whistle	
6th	ELA	Savvas ELA, Chromebooks, anchor charts, writing rubrics, mentor texts	Journal notebook, storytelling props, ground mats, bug spray, tissues, electrolyte packs	
6th	Social Studies	Primary source packets, atlases, interactive notebooks, maps	Trail maps, laminated culture cards, magnetic compass, spray sunscreen, small flag markers	
7th	Science	Lab materials, visual aids, weather data tools, slides	Water testing kit, compass, wind vane, portable first aid kit, wipes, sunscreen	
7th	Math	Formative assessments, geometry kits, data sets	Trail measurement flags, chalk, measuring wheels, hydration, backup calculator	
7th	ELA	Group discussion guides, text annotation tools, feedback rubrics	Writing clipboard, umbrella for shade, journals, safety cones, tissue kit	
7th	Social Studies	Simulations, timelines, civics case studies	Roleplay kits, historic re-creation props, shade tents, laminated fact sheets	
8th–9th	Science	Science lab kits, slides, Cornell notes, infographics	Binoculars, ecology journal, soil/plant ID cards, med kit, insect repellent	
8th–9th	Math	Algebra tiles, calculators, terrain maps, Desmos/Graphing tools	Slope-measuring tool, clipboards, real-world graph task cards, bandages, water spray fan	
8th–9th	ELA	Technical writing prompts, narrative structures, literary excerpts	Portable document kit, interview checklist, clipboard, storytelling rug, sunblock	
8th–9th	Social Studies	Traverse for 8th grade or another (HQIM) SS platform, Case studies, documentary clips, economic simulations	Outdoor timeline props, QR-coded resources, backup lesson folder, whistle	

ARKANSAS OUTDOOR ACADEMY, INC.
FAMILY HANDBOOK

2026–2027 School Year

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WELCOME

Welcome to Arkansas Outdoor Academy (AOA)! We are excited to partner with you in providing a high-quality, outdoor-based education that builds resilient, career-ready learners. This Family Handbook outlines the responsibilities, expectations, and supports that ensure student success at AOA. Our program draws inspiration from top-performing public charter schools across Arkansas.

SECTION I: OUR SCHOOL COMMUNITY

1.1 Mission & Vision
Our mission is to cultivate resilient, career-ready learners through outdoor education, experiential learning, and character development.

1.2 Core Values
- Responsibility - Respect - Integrity - Perseverance - Curiosity

1.3 Equal Opportunity
AOA is a public charter school. We do not discriminate on the basis of race, color, national origin, sex, disability, or age.

1.4 Communication with Families
AOA's primary communication method is through the AOA App. Families are expected to download and regularly check the app for announcements, messages, events, and updates. Additional communication occurs via email, weekly bulletins, and scheduled conferences.

SECTION II: ATTENDANCE & DAILY EXPECTATIONS

2.1 School Hours
School starts promptly at 8:00 AM and ends at 4:30 PM, Monday through Thursday. Consistent, on-time attendance is required.

2.2 Tardies and Absences
Excessive absences and tardies hinder student achievement. Parents must notify the school in advance of absences. More than **eight (8) unexcused absences** per semester may result in **loss of credit for high school courses** or **grade retention** for lower grade levels. AOA follows Arkansas law regarding compulsory attendance and truancy (Ark. Code Ann. § 6-18-222).

Medical notes for doctor's visits, doctor-diagnosed illnesses, or other health-related reasons **must be submitted to the front office within three (3) school days** of the student's return from the absence.

Administrative excuses must be requested and approved by the Principal **at least two weeks in advance** of the planned absence, except in exigent circumstances, which may be approved at the discretion of the Principal and the Superintendent of Schools.

2.3 Dress Code

AOA does not require a school uniform. However, students must wear clothing that is appropriate for the weather and outdoor learning environments. Clothing must not display profanity, slurs, or any offensive language or imagery. Closed-toe shoes and layered outerwear are recommended for outdoor activities.

2.4 Student Technology Use

Students must use devices responsibly, following AOA's Acceptable Use Policy and classroom rules.

SECTION III: AOA STUDENT CODE OF CONDUCT

3.0 Cell Phones and Electronic Devices

AOA follows Arkansas's Bell-to-Bell No Cell law. Students are required to store all personal electronic devices, including cell phones, in a designated secure location at the beginning of the school day. Students may access their phones during lunch **if they are onsite for lunch that day**, after which devices must be returned to storage for the remainder of the day. Use or possession of a cell phone during the instructional day—outside of approved times—is prohibited.

Violations of this policy are considered Level II offenses. Consequences may include Friday Detention or Out-of-School Suspension, depending on the number of prior offenses related to electronic device misuse.

3.1 Overview

AOA follows a school-wide Positive Behavioral Interventions and Supports (PBIS) framework. All students are expected to contribute to a safe, respectful, and responsible learning community.

3.2 PBIS & DPS System

AOA uses a digital PBIS platform to recognize positive behaviors and track Discipline Point System (DPS) infractions. DPS is used for minor offenses. Once a student reaches **105 negative points**, a referral will be made to the Superintendent and the Board of Trustees for review of possible long-term suspension or expulsion.

DPS Consequences Table

DPS Accrued	Consequence
15	Guardian call and/or letter home

30	Friday Detention
45	Friday Detention & Dean of Students (Dos) and Guardian Phone Call/Google Meet, Behavior Plan Created with Student Behavior Goals
60	One Day Out of School Suspension and in-person Guardian Meeting with DoS and Counselor, revision of Behavior Plan if needed
75	Two Days Out of School Suspension
90	Three Days Out of School Suspension
105	Recommendation of Expulsion or Long Term Suspension made by DoS to Superintendent. Forwarded to Board of Trustees for Approval

Examples of DPS Infractions: - getting up without permission: -2 pts, lack of materials: -2pts, excessive talking: -3 pts, Disruptive behavior: -5 pts, Tardy to class: -5 pts.

3.3 Leveled Offense System (Major Infractions)

Level I Offenses: - Disruption of learning environment **-** Mild defiance of authority - Inappropriate language (not directed at staff or students) **-** horseplay

Level II Offenses: - Obscene language directed at staff or other student - Harassment-escalated horseplay/scuffling - Repeated Level I behaviors - Academic dishonesty (cheating) - Insubordination - Unauthorized use or possession of cell phones or electronic devices during the school day **-**acts that could be classified as a misdemeanor by Arkansas state law

Level III Offenses: - Fighting **-** Theft or vandalism **-** Threats of physical harm **-** Repeated Level II behavior **-** Bullying **-**Possession or use of tobacco products (including, but not limited to, vapes, cigarettes, dip, etc.) A **second offense involving possession or use of tobacco products** will result in a **recommendation for expulsion**, subject to approval by the Board of Trustees.

Level IV Offenses: - Possession or use of drugs or weapons - Serious threats or violent conduct **-** Sexual Assault **-** Acts that could be classified as a felony per Arkansas state law - Repeated Level III offenses

Consequences:

Level I: Warning, parent contact, restorative practice, Friday Detention

Level II: Friday Detention, restorative practice, Out-of-School Suspension (up to 3 days per Level II offense, may result in up to six if multiple Level II offenses occur within the same incident)

Level III: OSS up to 9 days, possible law enforcement referral.

Level IV: Long-Term OSS (10+ days, Board of Trustees approval), or Expulsion (Board approval required)

Escalation Clause: After two Level I offenses, the third Level I offense will be treated with Level II consequences. This escalation applies to subsequent levels as well.

Appeal: Leveled Offenses classified Level II or above can be appealed by guardian.

3.4 Cooperation with Law Enforcement

AOA may report any student behavior that constitutes a **misdemeanor or felony offense** to local or state law enforcement agencies. The school will cooperate fully with all law enforcement investigations. Before a student is interviewed on school grounds by law enforcement for any alleged misdemeanor or felony, AOA will contact the student's parent or legal guardian and provide them the opportunity to be present during the interview.

3.5 Students with Disabilities

Disciplinary procedures for students with disabilities will follow the Individuals with Disabilities Education Act (IDEA) and Section 504 of the Rehabilitation Act. Prior to long-term suspension or expulsion, a Manifestation Determination Review (MDR) will be conducted for any student with an IEP or 504 Plan as required by federal law.

3.5 Title IX Policy

AOA complies fully with federal Title IX regulations prohibiting discrimination on the basis of sex in any education program or activity receiving federal financial assistance. Title IX protects students and staff from sexual harassment, sexual violence, and gender-based discrimination. AOA will promptly investigate all Title IX complaints and take appropriate remedial and disciplinary actions. Reports of Title IX violations should be submitted to the Title IX Coordinator, whose contact information is available through the AOA main office and website.

3.6 Sexual Harassment

AOA maintains a zero-tolerance policy for sexual harassment, in accordance with Arkansas Code § 6-18-514 and federal law under Title IX and the Civil Rights Act. Prohibited conduct includes unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature. Reports should be submitted to a school administrator or Title IX Coordinator and will be addressed promptly and confidentially.

3.7 Bullying

AOA defines bullying as any intentional written, verbal, electronic, or physical act that causes harm or fear to another student or substantially disrupts the learning environment. Bullying may include intimidation, threats, humiliation, social exclusion, or cyberbullying. All reported incidents will be investigated, and corrective measures will be taken in accordance with Arkansas Code § 6-18-514.

AOA enforces a **zero-tolerance policy** for bullying. If an investigation substantiates a bullying complaint: - On the **first offense**, the student will be subject to consequences outlined in the leveled discipline system and will be placed on formal behavioral **probation**. - On the **second substantiated offense**, the student will be **expelled for a full calendar year**, pending review and approval by the Board of Trustees.

3.8 Sexual Assault and Harassment Policy

AOA is committed to maintaining a learning environment free from sexual assault and harassment. Sexual assault includes any non-consensual sexual act prohibited by law, including but not limited to unwanted touching, rape, or attempted rape. Sexual harassment involves unwelcome sexual conduct that interferes with a student's ability to learn or participate in school activities.

AOA will take all allegations of sexual assault or harassment seriously. Incidents should be reported immediately to a trusted staff member, school administrator, or the Title IX Coordinator. Reports may also be submitted anonymously. The school will conduct a thorough, impartial investigation and, where appropriate, coordinate with law enforcement. Students involved in such cases may receive accommodations for their safety, including schedule changes or protective measures. Disciplinary action, up to and including expulsion, may be taken against those who violate this policy.

3.9 Acceptable Use of School-Issued Devices

Students may only use AOA-issued devices for teacher-approved educational purposes. They are fully responsible for the care, security, and appropriate use of their device and will be held financially accountable for damage, loss, or misuse. Devices must not be used to access inappropriate content or commit unlawful acts (including cyberbullying or harassment). AOA reserves the right to monitor and inspect devices at any time. Violation of these terms may result in loss of privileges, disciplinary action, and device-related charges.

SECTION IV: ACADEMICS AND STUDENT SUPPORTS

4.1 Curriculum

AOA uses Arkansas State Standards integrated with project-based and outdoor experiences. Our focus includes environmental science, agriculture, skilled trades, and leadership.

4.2 Homework & Academic Expectations
Homework reinforces classwork and builds independence. Students are expected to complete all assignments on time.

4.3 Special Education & 504 Services
AOA complies with IDEA and Section 504. If you suspect your child may need support, please contact the school counselor. Services and accommodations are provided based on individual eligibility and legal requirements.

4.4 Counseling and Mental Health
AOA provides access to school counselors and can refer families to licensed professionals if additional support is needed.

4.5 Pathway Program (Grades 9–12)
All students in 9th grade and above will participate in a Pathway Program, which connects academic coursework with outdoor careers, technical fields, or post-secondary options.

4.6 Use of Artificial Intelligence (AI)

Students may only use AI tools with teacher or administrative permission, and must clearly label any AI-generated content. AI cannot replace original student work, nor be used to misrepresent learning. Misuse will be treated as a breach of academic integrity, and AOA reserves the right to validate submissions using AI detection tools. AOA supports responsible integration of AI as an educational tool—with oversight, instruction, and ethical awareness.

SECTION V: HEALTH & SAFETY

5.1 Immunizations
Students must be current on all required vaccinations unless exempt under Arkansas law.

5.2 Medications
Medications must be provided in original packaging with parent authorization and will be administered by the School Nurse and/or designated personnel.

5.3 Emergency Drills
Fire, tornado, and lockdown drills will be held regularly. Families will be notified of actual emergencies through school communication channels. Drills will be outlined in the AOA Campus Safety Handbook.

5.4 Reporting Threats or Concerns
Students and families are encouraged to report bullying, threats, or unsafe behavior to a trusted adult or school administrator.

SECTION VI: FAMILY ENGAGEMENT

6.1 Family Expectations

Each family is expected to participate in at least **one after-hours or off-campus event per semester.**

These may include, but aren't limited to:

- Fall Hike @ Pinnacle Mountain State Park

- AOA Trail 5K Fundraiser

- Fall Fest booth at local Fall Fest/Farmer's Market

- Winter Wonderland at Lake Sylvia

- Family Climb Day @ Crystal Bluff (NLR Parks and Rec)

- Spring Cleaning (@ various state parks)

- Other school-organized family events

6.2 PTO and Volunteerism

AOA encourages all families to join our Parent-Teacher Organization (PTO), a separate but strongly aligned entity. Families are encouraged to volunteer at events, in classrooms, or on field learning days.

6.3 Volunteer Hour Requirement

The state of Arkansas requires students to complete 75 volunteer hours. However, AOA requires **100 volunteer hours** to graduate. Of these, **25 hours must be completed in approved state or local parks and recreation programs.**

6.4 Feedback and Surveys

We regularly solicit input from families to improve school operations and climate.

6.5 Grievance Process

Families should follow this process for grievances:

1. Address concern with teacher/staff

2. Escalate to school leader

3. Submit a written grievance to the Superintendent 4.

Request a Board review (if necessary)

ACKNOWLEDGMENT FORM (to be signed separately)

I have read and understand the Arkansas Outdoor Academy Family Handbook for the 2025–2026 school year. I agree to support the school's mission, PBIS behavior model, and academic expectations.

Parent/Guardian Name: _____

Signature: _____ Date: _____

Student Name: _____

Grade: _____

Arkansas Outdoor Academy Student Pledge of Conduct
Grounded in Tradition. Guided by Research. Inspired by Nature.

At the Arkansas Outdoor Academy, we believe that learning is more than academics — it is a journey of character, connection, and contribution.

Our Student Pledge of Conduct is more than a set of rules — it is a living agreement. It reflects research-supported best practices in resilience and community engagement, place-based education, and leadership development, which show that students thrive when they are empowered to:

- Take ownership of their behavior and growth
- Build meaningful relationships and inclusive communities
- Act as stewards of their environment and leaders in their world

This pledge is part of how we build a school culture rooted in trust, safety, and responsibility — both in the classroom and on the trail.

I pledge to:

Respect Myself and Others

- Treat all classmates, staff, and community members with dignity and kindness
- Embrace diverse backgrounds, ideas, and identities
- Speak honestly and listen with empathy

Respect the Land and Environment

- Practice Leave No Trace and care for the natural spaces we learn in
- Protect and learn from the ecosystems around us
- Honor the land, its history, and its future

Lead with Integrity and Courage

- Take ownership of my choices and their impact
- Stand up for what is right, even when it's uncomfortable
- Support others and lead through service and example

- Represent Arkansas Outdoor Academy with pride, both on campus and in the broader community

Learn with Purpose

- Be curious, engaged, and open to challenge
- Seek to understand the world and my place in it
- Apply my learning to make a positive difference

Contribute to a Safe and Inclusive Community

- Help create a space where everyone feels safe, seen, and supported
- Solve problems collaboratively and with care
- Use my voice to uplift others and build community

I understand that as a student of Arkansas Outdoor Academy, I am not only here to learn — I am here to lead, to care, and to grow. I understand that my job as a **community leader** is to use my actions, my voice, and my values to serve something greater than myself. I will honor this pledge every day as a commitment to myself, my school, and the world around me.

Signed,

Student Name
Date: _____

BYLAWS OF ARKANSAS OUTDOOR ACADEMY, INC.

ARTICLE I – NAME, OFFICES, AND SEAL

Section 1. Name. The name of this nonprofit corporation shall be Arkansas Outdoor Academy, Inc. ("AOA").

Section 2. Principal Office. The Corporation shall maintain a principal office in Central Arkansas. Upon the purchase of a permanent facility, the municipality in which the building is located shall be designated as the location of the principal office.

Section 3. Registered Office and Agent. The Corporation shall maintain a registered office in the State of Arkansas and a registered agent whose address is identical with the registered office. The registered office and agent may be changed by the Board of Trustees.

Section 4. Corporate Seal. The Corporation shall have a seal bearing the name "Arkansas Outdoor Academy, Inc." and the year of incorporation within two concentric circles.

ARTICLE II – PURPOSE AND NONPROFIT STATUS

Section 1. Purpose. The Corporation is organized exclusively for educational and charitable purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code. The Corporation shall operate as an open-enrollment public charter school to provide innovative, outdoor-based, experiential education preparing students for college, careers, and civic life.

Section 2. Nonprofit Status. The Corporation shall not issue stock, pay dividends, or distribute earnings to individuals. Upon dissolution, assets shall be distributed to another public educational entity or nonprofit consistent with the Corporation's mission.

ARTICLE III – MEMBERSHIP

Section 1. Membership. The Corporation may, but is not required to, have Members. If Members exist, they shall include parents or guardians of enrolled students, Officers, and Trustees.

Section 2. Rights and Duties. Members, if designated, may receive notice of meetings, vote in annual elections, and serve on committees. The Board of Trustees may further define membership rights by policy.

ARTICLE IV – BOARD OF TRUSTEES

Section 1. Authority. The Board of Trustees shall govern the Corporation, establish policy, and oversee operations in accordance with applicable law and the Corporation's mission.

Section 2. Composition. The Board shall consist of not fewer than five (5) nor more than nine (9) Trustees. The Corporation shall begin with five (5) Trustees. For each increase of one hundred (100) students in total school enrollment, the Board shall appoint two (2) additional Trustees, not to exceed a maximum of nine (9) Trustees. All Trustees must be natural persons and residents of the State of Arkansas. No Trustee shall be an employee or have been employed by AOA within the past two years.

Section 3. Terms. Trustees shall serve staggered three-year terms. There shall be no limit on the number of consecutive terms a Trustee may serve.

Section 4. Appointment. Trustees shall be elected by a majority vote of the existing Board. Vacancies may be filled by the same process.

Section 5. Removal. Trustees may be removed by a two-thirds (2/3) vote of the Board for cause or failure to fulfill duties. Absence from three (3) consecutive meetings without excuse may constitute cause.

Section 6. Meetings. The Board shall meet at least monthly, with one annual meeting each May. Special meetings may be called by the President or any two Trustees with reasonable notice.

Section 7. Quorum and Voting. A majority of the Board shall constitute a quorum. The act of a majority present shall be the act of the Board.

Section 8. Conflict of Interest. Trustees shall annually disclose conflicts and recuse themselves where appropriate. A Conflict of Interest Policy shall be maintained.

ARTICLE V – OFFICERS

Section 1. Officers. The Officers of the Corporation shall include a President, Secretary, and Treasurer. Additional officers may be created by resolution.

Section 2. Election and Term. Officers shall be elected annually by the Board of Trustees at the annual meeting and serve one-year terms.

Section 3. Duties. The President presides over meetings; the Secretary keeps records and minutes; the Treasurer oversees financial matters.

Section 4. Removal and Vacancies. Officers may be removed by majority vote of the Board. Vacancies shall be filled by Board appointment.

ARTICLE VI – COMMITTEES

Section 1. Creation. The Board may establish committees as needed, including but not limited to Finance, Governance, Academic Excellence, Outdoor Learning, and Workforce Readiness.

Section 2. Authority. Committees shall act only under authority delegated by the Board.

Section 3. Membership. Committees may include non-Trustee members as determined appropriate.

ARTICLE VII – EXECUTIVE DIRECTOR

Section 1. Appointment. The Board shall appoint an Executive Director to manage the daily operations of the school.

Section 2. Duties. The Executive Director shall implement Board policies, manage staff and programs, and report to the Board.

ARTICLE VIII – STAFFING AND COMPLIANCE

Section 1. Background Checks. All staff shall undergo criminal background and child maltreatment registry checks per ADE requirements.

Section 2. Non-Discrimination. The Corporation shall comply with all state and federal non-discrimination laws, including Title VI, Title IX, ADA, and Section 504.

Section 3. Special Education. The school shall provide services consistent with IDEA and Section 504.

ARTICLE IX – FINANCIAL MANAGEMENT

Section 1. Fiscal Year. The fiscal year shall be from July 1 to June 30.

Section 2. Budget. The Board shall adopt an annual budget. Monthly financial reports and an annual audit shall be presented to the Board and submitted to ADE.

Section 3. Deposits and Disbursements. All funds shall be deposited in Board-approved institutions. Expenditures shall follow internal controls, including dual signature requirements.

ARTICLE X – RECORDS AND REPORTING

Section 1. Records. The Corporation shall maintain all required records, including meeting minutes, financial reports, and student performance data.

Section 2. ADE Reporting. The Corporation shall comply with all reporting requirements of the Arkansas Department of Education, including enrollment, discipline, demographics, and student outcomes.

ARTICLE XI – EVALUATION AND OVERSIGHT

Section 1. Monitoring. The Corporation shall cooperate with ADE oversight, including annual evaluations, site visits, and performance reviews.

Section 2. Charter Modification. Changes to the school's mission, structure, or academic model must be approved in accordance with ADE rules.

ARTICLE XII – INDEMNIFICATION

Section 1. Indemnification. The Corporation shall indemnify Trustees, Officers, and employees to the extent permitted by law.

ARTICLE XIII – AMENDMENTS

Section 1. Amendments. These Bylaws may be amended by a two-thirds (2/3) vote of the Board at any meeting, provided written notice is given at least seven (7) days in advance.

ARTICLE XIV – CONFLICT OF INTEREST

Section 1. Policy Requirement. The Board shall adopt and maintain a Conflict of Interest Policy consistent with applicable state and federal laws. All Trustees, Officers, and key employees must adhere to this policy.

Section 2. Disclosure. Each Trustee and Officer shall annually complete and sign a conflict of interest disclosure form and disclose any actual or potential conflict of interest prior to the discussion of an applicable agenda item.

Section 3. Recusal. No Trustee or Officer shall vote on any matter in which they, their family members, or business associates have a financial or personal interest. Such individual must recuse themselves from both discussion and voting and may be asked to leave the room during deliberation.

Section 4. Recording. Any disclosed conflict and corresponding recusal shall be documented in the meeting minutes.

Section 5. Enforcement. Violations of this policy may result in removal from the Board in accordance with Article IV, Section 5 of these Bylaws.

CERTIFICATION These Bylaws were adopted by resolution of the Board of Trustees of Arkansas Outdoor Academy, Inc. on _____, 2025.

Secretary

President

ARKANSAS OUTDOOR ACADEMY, INC.
STAFF HANDBOOK
2025–2026 School Year

WELCOME

Welcome to Arkansas Outdoor Academy (AOA)! We are thrilled to have you join our team of dedicated educators and professionals who believe in the power of outdoor-based learning. This Staff Handbook outlines the roles, expectations, and supports that ensure a strong, safe, and inclusive learning environment.

SECTION I: SCHOOL OVERVIEW

1.1 Mission & Vision

AOA cultivates resilient, career-ready learners through outdoor education, experiential learning, and character development.

1.2 Core Values

- Responsibility
- Respect
- Integrity
- Perseverance
- Curiosity

1.3 Equal Opportunity Employer

AOA does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, sexual orientation, or any other protected status. All hiring, assignments, and evaluations are conducted fairly and equitably.

SECTION II: PROFESSIONAL RESPONSIBILITIES

2.1 Professional Expectations

All staff are expected to:

- Uphold the mission and values of AOA
- Serve as positive role models
- Create inclusive, engaging, and rigorous learning environments
- Maintain professionalism in appearance and communication
- Be present and prepared for all scheduled work days

2.2 Required Trainings

Staff must complete the following annual trainings:

- Mandated Reporter (Arkansas Code § 12-18-402)
- FERPA and student confidentiality
- Title IX compliance
- Suicide prevention and mental health
- PBIS and classroom management
- Technology Acceptable Use

2.3 Evaluation & Feedback

Classroom teachers will be evaluated through formal and informal observations aligned with the Arkansas Teacher Excellence and Support System (TESS). Support staff and administrators will receive regular feedback from their direct supervisor.

SECTION III: SCHOOL POLICIES

3.1 Attendance & Absences

Staff must report absences as early as possible through the designated AOA platform. Excessive absences, habitual tardiness, or unreported leave may result in disciplinary action.

3.2 Dress Code

Staff are expected to wear professional, weather-appropriate attire suitable for outdoor learning. Closed-toe shoes are required. No offensive or inappropriate logos or language may appear on clothing.

3.3 Staff Conduct

Employees must:

- Maintain appropriate boundaries with students
- Avoid conflicts of interest (see Appendix B)
- Refrain from using profanity or engaging in conduct unbecoming of a public school employee
- Report all suspected child abuse or neglect

3.4 Confidentiality

Staff must protect all student records and confidential information in accordance with FERPA.

3.5 Mandatory Reporting

All staff are mandated reporters and must report suspected abuse or neglect immediately to the Arkansas Child Abuse Hotline (1-800-482-5964) and notify the Superintendent.

SECTION IV: STUDENT SUPPORT & SAFETY

4.1 Special Education & 504

Teachers are legally responsible for implementing all IEP and 504 accommodations. Staff must participate in required meetings and maintain documentation.

4.2 Positive Behavior Support

AOA uses a PBIS system that includes classroom strategies, DPS tracking for minor offenses, and a leveled discipline structure for major incidents. Teachers are expected to implement PBIS practices consistently.

4.3 Crisis & Emergency Response

Staff must participate in all emergency drills and follow school-wide protocols during lockdown, evacuation, or medical emergencies.

4.4 Technology Use

Use of AOA technology must comply with the Acceptable Use Policy (Appendix A). Staff are responsible for reporting damage, ensuring student supervision online, and avoiding inappropriate internet activity.

SECTION V: LEAVE & BENEFITS

Maternity Leave: Maternity leave is provided in accordance with Arkansas state law. Eligible employees may use accrued PTO and, if qualified, may also access unpaid leave under the Family and Medical Leave Act (FMLA). For additional support or accommodations, employees should contact Human Resources.

In the event of sudden illness or emergency, staff must notify their direct supervisor via call or text **no later than 6:30 AM** on the day of the absence.

Bereavement Leave:

- **Five (5) days** for immediate family members (spouse, child, parent, sibling, grandparent, grandchild)
- **Three (3) days** for extended family (aunt, uncle, cousin, niece, nephew, in-laws)

Additional unpaid leave may be granted at the discretion of the Superintendent. FMLA leave is available to eligible employees in accordance with federal law.

Refer to your offer letter or HR policy for full benefits details.

5.2 Breaks & Planning Time

Teachers will receive at least 40 minutes of duty-free planning daily and a 30-minute lunch period.

Benefits are pending prior to hiring staff and shopping best providers.

SECTION VI: GRIEVANCES

6.1 Staff Grievance Procedure

If you have a concern, please follow this process:

1. Discuss with your direct supervisor
2. If unresolved, submit a written grievance to the Superintendent
3. If necessary, request a review by the Board of Trustees

A grievance form is included in Appendix C.

SECTION VII: ACKNOWLEDGMENT FORM

I acknowledge that I have received, read, and understood the Arkansas Outdoor Academy Staff Handbook. I agree to adhere to all policies and procedures described herein.

Name: _____
Signature: _____
Date: _____

APPENDIX A: TECHNOLOGY ACCEPTABLE USE POLICY

(developing acceptable use policy)

APPENDIX B: CONFLICT OF INTEREST POLICY

(Developing conflict of interest policy)

APPENDIX C: STAFF GRIEVANCE FORM

Name: _____
Position: _____
Date: _____

Describe the nature of your concern:

_____
_____

Steps taken to resolve this issue:

_____
_____

Requested resolution:

_____
_____

Signature: _____
Date: _____

https://www.colliers.com/en/properties/for-sale-or-lease-1500-riverfront-dr-little-rock/usa-1500-riverfront-drive-little-rock-ar-72202/usa1026839

AOA Community Meeting

Tuesday, Aug 19 · 6–6:30 PM

Repeats every week

Join with Google Meet

meet.google.com/ppd-jrrw-agb

Join by phone

10 minutes before

Arkansas Outdoor Academy Advisory Board: Roles & Functions

Guiding Excellence in Outdoor-Based Education

Overview

The Arkansas Outdoor Academy Advisory Board brings together a dynamic and diverse group united by a shared commitment to educational excellence and student opportunity. Composed of educators with deep classroom experience, industry leaders from key outdoor sectors, community partners invested in youth development, and passionate advocates for equitable education, the board acts as a strategic think tank for the school's mission and growth.

While the board operates in an advisory capacity—without direct governance or financial oversight—it exerts substantial influence through thought leadership, collaborative problem-solving, and advocacy. Members are selected for their expertise, community connections, and dedication to supporting the Academy's vision of outdoor-integrated learning that prepares students for the modern workforce and civic life.

Structure & Meetings

The Advisory Board meets regularly to assess the evolving needs of the Academy and the communities it serves. Its work is guided by principles of transparency, inclusivity, and continuous improvement, ensuring that all voices—students, families, educators, employers, and community leaders—are heard and valued in shaping the Academy's future.

Core Responsibilities

- Strategic Program Guidance: Advise on the direction, priorities, and long-term vision of the school's outdoor-based learning model, including refining the focus of core academic and career pathway offerings.
- Academic & Career Pathway Relevance: Ensure the three career pathways (Conservation Sciences, First Responders, Tourism & Recreation) align with current workforce needs. Provide guidance on certifications, field experiences, and real-world skills.
- Community & Industry Partnership Development: Serve as a connector between the school and local/state organizations. Facilitate mentorships, internships, field learning, and resource-sharing.
- Student Opportunity & Equity Advocacy: Advocate for equitable access to outdoor learning and career experiences. Offer insight into transportation, gear, and academic or behavioral supports for diverse learners.

- Curriculum Innovation Feedback: Review and advise on outdoor-integrated curriculum, interdisciplinary learning models, and creative instructional strategies that reflect real-world relevance.
- School Climate and Student Experience Insight: Support the development of a healthy, inclusive, and empowering school culture. Provide feedback on discipline models, student leadership, and climate data.
- Data and Continuous Improvement Oversight: Review academic and programmatic data. Recommend adjustments to strategies or supports to ensure ongoing improvement.
- Charter & Mission Alignment Support: Ensure the school stays true to its founding mission and meets commitments outlined in the charter application.
- Public Advocacy and Storytelling: Promote the school's story publicly. Assist with events, media, awards, and outreach to build awareness and momentum.
- Resource Development Support: Support school leadership in identifying grants, gear donations, or funding opportunities that enhance the outdoor learning experience.
- Advisory-Only Governance Distinction: Clarify that the advisory board provides support and guidance but does not serve as the school's legal governing board.

8/5/25

To Whom it May Concern

My name is Blane McClellan. I am the Co-Founder of Frontier Climbing Company (FCC), an outdoor rock climbing instructor certified by the American Mountain Guide Association, Regional Director of the American Scholastic Climbing League of Arkansas, and a board member of the Arkansas Climbers' Coalition. I am also a father of two young adults who grew up and went to public school in Little Rock. I am writing this letter in support of the Arkansas Outdoor Academy (AOA).

From a business perspective I can tell you that my number one concern right now for the outdoor recreation industry in Arkansas, is not having enough qualified applicants. I started FCC with two goals in mind. I want to remove barriers to rock climbing and give more kids and families the opportunity to discover the benefits of rock climbing. I also wanted to create a business that would offer legitimate career opportunities to people who love climbing and the outdoors. We are at an amazing point in time here in AR when a lot of resources and support are being put into our Outdoor Economy. The Outdoor Economy in AR now produces more revenue than farming. In order for me as an outdoor industry business owner to meet the demand of our customers and accomplish our goals we need schools like AOA. AOA will give young students skills they can take directly out of high school and put to work actually doing something they're passionate about.

As a father I have witnessed the impact of spending a lot of time with my kids in nature and how rock climbing has changed the trajectory of their lives. Our kids are growing up in a much different world than we did. Smartphones demand the majority of our time throughout every day. The human attention span is now shorter than that of a goldfish. Spending time in nature is not only transformational but vital to keep ourselves grounded in what's actually important in life. I know this from my own personal experiences and I've seen how impactful it is to our young adults. I believe that AOA will provide an extremely beneficial experience to young adults when they need it the most.

We also need to give more students the experience of spending time outdoors because it creates future advocates and protectors of these spaces. Many of us rely on access to outdoor recreation for our physical, mental, and even spiritual well-being. The only way we as a society will keep and maintain these outdoor spaces is to make sure that our young people today understand why this is important. That is accomplished by safely introducing students to nature and outdoor recreation. AOA is showing up at a time when more students need them, and our outdoor industry as a whole in AR needs AOA. I whole heartedly support their mission.

Blane McClellan

To Whom It May Concern,

As an outdoor recreation advocate, Ambassador for the Arkansas Climbers Coalition, and State Director of the American Scholastic Climbing League of Arkansas, I am writing this letter in strong support of the Arkansas Outdoor Academy, a proposed charter school in Little Rock that prioritizes outdoor education, leadership, and conservation.

The Arkansas Outdoor Academy represents a vital and long overdue investment in our state's youth, particularly at a time when connection to the natural world is both increasingly rare and deeply needed. Across the state, we see the benefits of outdoor recreation firsthand: it fosters resilience, builds confidence, encourages collaboration, and promotes lifelong physical and mental well-being. Yet access to these benefits remains inequitable, with many students, especially in urban and underserved communities, lacking structured opportunities to engage with nature meaningfully. This school will change that.

Through its hands-on curriculum, the Arkansas Outdoor Academy will empower students to develop critical thinking skills, environmental stewardship, and career-ready competencies in conservation, recreation, and leadership. As State Director of the American Scholastic Climbing League, I have witnessed the transformative impact of outdoor sports on young people. Climbing, hiking, trail building, and outdoor exploration have not only enriched students' academic engagement but also cultivated leadership and a strong sense of identity.

As an Ambassador for the Arkansas Climbers Coalition, I can also attest to the urgent need for cultivating a generation of land stewards and conservation-minded leaders. Our state is rich in natural beauty, but protecting that beauty requires education, intention, and access. Arkansas Outdoor Academy bridges these needs. It introduces young people to public lands, teaches them to care for these spaces, and equips them with the tools to one day lead within them.

This is not just a school. It is a pipeline for outdoor leadership, conservation ethics, and equitable access to the outdoors in Arkansas, designed to meet the demands of our growing outdoor economy. I strongly encourage you to support this essential endeavor.

Sincerely,
Sharon Bennett
Ambassador, Arkansas Climbers Coalition
State Director, American Scholastic Climbing League of Arkansas

To Whom It May Concern,

As the Owner and Editor of ArkansasOutside.com, a publication dedicated to covering outdoor recreation across the Natural State, I am writing to express my strong support for the Arkansas Outdoor Academy, a proposed charter school in Little Rock that will focus on outdoor education, leadership development, and environmental stewardship.

At ArkansasOutside.com, we've spent more than a decade highlighting the transformative power of outdoor experiences. We've seen firsthand how time spent in nature builds confidence, resilience, and a sense of community. We've covered countless stories of Arkansans who've found direction, purpose, and even careers through outdoor recreation. Yet, access to these experiences remains out of reach for far too many young people, particularly those in underserved and urban areas.

The Arkansas Outdoor Academy offers a compelling solution. Its hands-on, outdoor-centered curriculum is designed to equip students with critical thinking skills, leadership abilities, and career-ready competencies in conservation and recreation. More importantly, it provides meaningful access to outdoor spaces and experiences that can help students thrive academically, emotionally, and physically.

At a time when Arkansas is experiencing growth in its outdoor recreation economy, the Academy will help develop the next generation of outdoor professionals and land stewards. By introducing students to public lands and teaching them how to care for and lead within these spaces, the Academy will serve as a vital link between education and the sustainable future of our outdoor resources.

This initiative is about more than education. It is about ensuring that all young Arkansans—regardless of background—have the opportunity to connect with the natural world and become leaders in its preservation and enjoyment. I urge your full support for the Arkansas Outdoor Academy.

Sincerely,
Joe Jacobs
Owner/Editor
ArkansasOutside.com

Ouachita National Forest Features Near Little Rock for Outdoor Education

1. Flatside Wilderness

- **Distance:** About 45 minutes west of Little Rock
- **Educational Focus:**
    - Forest ecology and native species
    - Geology and topography (Flatside Pinnacle overlook)
    - Wilderness stewardship and Leave No Trace principles
- **Why it works:** It's a true wilderness area with scenic trails, minimal infrastructure, and a quiet environment for immersive ecology lessons or field journaling.

2. Lake Sylvia Recreation Area

- **Distance:** About 40 minutes west of Little Rock
- **Educational Focus:**
    - Watershed systems and freshwater ecology
    - Orienteering and forest navigation
    - Civilian Conservation Corps (CCC) history
- **Why it works:** It has campsites, restrooms, and lake access. It's ideal for overnight outdoor leadership programs or aquatic studies.

3. Ouachita National Recreation Trail (Eastern Terminus at Pinnacle Mountain)

- **Distance:** About 30 minutes from Little Rock
- **Educational Focus:**
    - Trail systems and long-distance hiking culture
    - Biodiversity and habitat zones
    - Navigation and map reading
- **Why it works:** The trail is accessible for short- or long-term study. It's excellent for introducing students to hiking, wilderness preparation, and forest management.

4. North Fork Pinnacle / Crystal Mountain Scenic Area

- **Distance:** About 1 hour west of Little Rock (near Jessieville)
- **Educational Focus:**
    - Geologic features like quartz veins and sandstone bluffs
    - Vegetation changes across elevation
    - Scenic conservation and land-use planning

- **Why it works:** This area combines visual drama with accessible ridge hikes and is ideal for geology, photography, or interpretive writing sessions.

5. Iron Springs Recreation Area

- **Distance:** About 1 hour west of Little Rock
- **Educational Focus:**
    - Spring-fed ecosystems and water cycle
    - CCC-era history and site restoration
    - Environmental ethics and responsible recreation
- **Why it works:** It's quiet, shaded, and low-traffic. This makes it ideal for group discussions, site sketching, and stream ecology activities.

Other Nearby Education-Supportive Areas

- **Pinnacle Mountain State Park –** Easy access, connects to the Ouachita Trail, already well-known for school field trips.
- **Rattlesnake Ridge Natural Area –** About 25 minutes away; good for geology, raptor education, and native species observation.
- **Lake Maumelle / Ouachita Trail trailheads –** Great for teaching watershed management and long-term trail use.

Summary Table

Location	Distance from Little Rock	Educational Focus
Flatside Wilderness	~45 minutes	Forest ecology, wilderness ethics, geology
Lake Sylvia Recreation Area	~40 minutes	Watershed science, camping, CCC history
Ouachita Trail Terminus	~30 minutes	Trail navigation, hiking safety, biodiversity
North Fork Pinnacle / Crystal Mountain	~1 hour	Geology, scenic land use, plant communities
Iron Springs Recreation Area	~1 hour	Spring systems, CCC structures, environmental ethics
Rattlesnake Ridge	~25 minutes	Raptors, geology, natural area management

The Arkansas State Parks system includes 52 parks statewide. The following are within approximately 30 to 90 minutes of Little Rock and are ideal for educational use:

Pinnacle Mountain State Park
Distance: 20–30 minutes west of Little Rock
Features: 33+ miles of trails, mountain biking, Arkansas Arboretum, nature center, environmental education programs

Petit Jean State Park
Distance: About 1 hour west
Features: Cedar Falls, Stouts Point, CCC-era lodges, geology exploration, interpretive trails, cabins, lake activities

Lake Sylvia Recreation Area
Distance: About 40 minutes west
Features: Forest lake, hiking, campsites, CCC history, watershed and aquatic education

Plantation Agriculture Museum State Park
Distance: About 25–30 minutes east (in Scott, AR)
Features: Indoor exhibits, Delta farming heritage, interactive agricultural displays

Lake Catherine State Park
Distance: About 1 hour southwest
Features: Waterfall hike, lake access, cabins, nature programs, wildlife observation

DeGray Lake Resort State Park
Distance: About 1.5 hours southwest
Features: Boating, interpretive nature programs, resort lodging, birdwatching, geology

Mount Nebo, Mount Magazine, and Woolly Hollow State Parks
All within 1.5–2 hours of Little Rock and great for overnight and extended field experiences involving elevation ecology, trail systems, and CCC history

Little Rock City Parks

The City of Little Rock maintains 63 developed parks. Here are some of the most suitable for outdoor education:

Riverfront Park
Downtown; walking trails, amphitheater, sculptures, access to the Arkansas River Trail

Two Rivers Park
Woodland and wetland trails, wildlife viewing, access to river confluence and long-distance trail systems

Allsopp Park (North and South)
Multi-use trail system, wooded terrain, picnic areas

Boyle Park
250-acre park with woodlands, trails, creek, pond, CCC stone structures

River Mountain Park
Elevated terrain, mountain biking trails, forested loops

MacArthur Park
Urban park with pond, playground, and proximity to Museum of Discovery and Arkansas Arts Center

Kanis Park, Knoop Park, Gillam Park (Audubon Center)
All offer various combinations of trails, forested space, nature programs, and wildlife habitats

Arkansas River Trail
15+ mile multi-use trail connecting dozens of parks and educational sites along both sides of the river

Additional parks include: Morehart Park, Rock Creek Park, Brodie Creek Trail, Reservoir Park, Crump Park, Otter Creek Park, and dozens of smaller neighborhood parks that can support structured nature walks or physical education programs

North Little Rock Parks

North Little Rock Parks and Recreation oversees about 39 parks and multiple recreation centers. The largest and most notable include:

Burns Park
Over 1,700 acres; includes hiking trails, mountain biking, RV camping, ball fields, golf courses, river access, and historical features like WWII-era buildings

T. R. Pugh Memorial Park (The Old Mill)
Historic mill replica featured in *Gone With the Wind*, popular for history and art studies

North Shore Riverwalk Park
Part of the Arkansas River Trail system; good for walking, cycling, and environmental observation

Emerald Park
Overlooks the Arkansas River; great for geology and photography

Big Rock Quarry Park
Wooded open space with trails and potential for environmental and restoration education

Campbell Lake Park, Conley Park, Riverview Park, Crestview Park, W. C. Faucette Memorial Park
All provide open space, trails, and opportunities for low-impact outdoor learning

Summary Table

System	Number of Parks	Notable Educational Sites
Arkansas State Parks	52 total (5–7 near LR)	Pinnacle Mountain, Petit Jean, Lake Sylvia, Plantation Museum
Little Rock City Parks	63 developed parks	Riverfront, Allsopp, Boyle, Two Rivers, River Mountain
North Little Rock Parks	About 39	Burns Park, The Old Mill, Emerald Park, Big Rock Quarry

Arkansas Outdoor Academy Outreach & Enrollment Plan

Strategy for Building Awareness and Enrollment (Grades 6–9)

Goal

Build awareness, trust, and enrollment interest among families in Central Arkansas for grades 6–9, using low-cost, high-impact strategies rooted in community values.

Phase 1: Immediate Visibility (Weeks 1–2)

Objective: Introduce the school to the public, share your mission, and drive early awareness.

- Launch Social Media Accounts
- Platforms: Facebook, Instagram
- Post 3–5 introductory pieces about the mission, pathways, and student experience
- Ask 10 trusted community members to share

Email & Text Trusted Community Partners

Send blurbs/flyers to groups such as Arkansas Game & Fish, EMS, Fire, First Responders, state parks & outdoor orgs, faith-based groups, youth programs, and Title I liaisons

Request newsletter mentions or table space at events

Create Google Interest Form

Fields: Student name, grade, parent contact, how they heard about you

Include the form link or QR code in all outreach materials

Design & Print Flyers

- Simple half-sheet, black and white
- Include mission, contact info, and QR code to interest form

Phase 2: Community Connection (Weeks 2–4)

Objective: Build relationships, gather contact info, and begin direct outreach.

- Set Up Pop-Up Info Tables
- Locations: Farmers markets, sports fields, parks, trailheads
- Bring flyers, sign-up sheets, and small giveaways (bug wipes, trail maps)

Launch Parent Referral Challenge

Incentive: School swag or raffle entry for each referral who submits the interest form

Track referrals using the Google Form

Distribute Flyers in High-Traffic Areas

Places: Barbershops, diners, corner stores, laundromats, libraries

Post on community bulletin boards using masking tape

Phase 3: Demonstrate the Vision (Weeks 4–6)

Objective: Create moments where families experience what the school is about.

- Host “Backyard Experience” Event
- Free outdoor event (1–2 hours)
- Activities: Compass scavenger hunt, knot tying, journaling station
- Collect interest forms on-site
- Invite local media and partners

Share Real Stories on Social Media

Post quotes or short videos from students, outdoor educators, or board members about the school’s value

Phase 4: Ongoing Momentum (Weeks 6+)

Objective: Maintain steady outreach while deepening trust and enrollment.

- Weekly Social Posts
- Spotlight pathways, student readiness, and fun facts
- Every post includes a call to action: “Fill out our interest form” or “Join our next info event”

Track & Follow Up

Follow up with all interest form submissions within 3 days

Invite families to Q&A sessions or virtual info nights

Continue Partner Engagement

Send monthly email updates to partners with impact stats, upcoming events, and success stories

SEVENTH GRADE CURRICULUM

CORE IDEAS AND TOPICS			
	PHYSICAL SCIENCES	**LIFE SCIENCES**	**EARTH & SPACE SCIENCES**
SEVENTH GRADE	Thermal energy, heat transfer, and simple machines as observed in natural systems and outdoor equipment. 7-PS1	Food webs, ecosystems, and human impact on biodiversity. 7-LS1, 7-LS2	Plate tectonics, weathering and erosion, natural disasters, and resource management. 7-ESS2, 7-ESS3

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Explain how thermal energy and simple machines relate to survival and outdoor equipment.
- Model ecosystem interactions and analyze human impacts.
- Describe plate tectonics, erosion, and natural hazards in Arkansas.
- Develop and test outdoor tools and emergency response designs.

PERFORMANCE EXPECTATIONS

Life Sciences (LS)

- Students explore population dynamics, biodiversity, and how environmental changes affect ecosystems.

Earth and Space Sciences (ESS)

- Students examine Earth's surface processes including plate tectonics, natural hazards, and hydrological systems. Field investigations include erosion impact studies and water quality testing.

Engineering, Technology, and Applications of Science (ETS)

- Students engineer solutions to wilderness problems such as temporary shelter design or emergency water filtration. They continue developing their iterative testing skills and decision matrices to optimize outcomes.

At AOA, seventh grade students are developing proficiency with all four ETS performance expectations (MS-ETS1-1 to MS-ETS1-4). Through field-based projects, students identify challenges such as weather impacts or emergency planning needs. They use real tools, digital and physical models, and the outdoor landscape itself as a learning environment. AOA emphasizes a flexible design-thinking mindset: students prototype and refine survival tools, test filtration systems, and evaluate shelter designs, reflecting the authentic, iterative problem-solving approach that engineering requires.

First Responder & Outdoor Safety

- Wilderness first aid
- GPS and compass training
- Disaster planning protocols

Outdoor Project Focus

- Geological surveys
- Emergency response map creation
- Eco-camp planning

SEVENTH GRADE ELA CURRICULUM

CORE IDEAS AND TOPICS	
SEVENTH GRADE	Outdoor adventure narratives, environmental debate, wilderness manuals. RI.7.1–10, W.7.1–10, SL.7.1–6, L.7.1–6

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Write well-developed arguments considering multiple perspectives on environmental issues, using evidence and reasoning.
- Compose outdoor adventure narratives that include character development, tension, pacing, and sensory details.
- Conduct short and sustained research projects that address real-world environmental concerns and possible solutions.
- Use domain-specific vocabulary related to nature, conservation, and outdoor skills across various forms of writing and speaking.
- Analyze how authors present contrasting points of view and rhetorical strategies in scientific and environmental texts.
  Integrate visual and multimedia elements (charts, graphs, maps, videos) to enhance research presentations and manuals.
- Create and revise how-to texts (e.g., fire-building guides, trail etiquette manuals) for clarity, organization, and audience awareness.
- Participate in formal debates and discussions, using respectful discourse and citing evidence to support opinions.
- Use annotation and note-taking strategies when analyzing texts in outdoor settings (e.g., field guides, journals).
- Maintain a reflective outdoor journal documenting experiences, connections to literature, and personal growth.

PERFORMANCE EXPECTATIONS

Students will:

- Analyze how authors develop and contrast points of view in informational and literary texts, including environmental articles and outdoor narratives.
- Write arguments to support claims with clear reasons and relevant evidence, incorporating counterclaims and using effective transitions.
- Conduct research projects to answer a question or solve a problem, using multiple print and digital sources while assessing source credibility.
- Develop and strengthen writing through planning, revising, editing, rewriting, or trying a new approach, especially in the context of environmental advocacy.
- Integrate multimedia and visual displays (e.g., infographics, photographs, diagrams) into presentations to clarify information and enhance engagement.
- Draw evidence from literary or informational texts to support analysis, reflection, and research on conservation topics.
- Demonstrate command of conventions of standard English grammar and usage when writing and speaking in technical and narrative forms.
- Adapt speech to a variety of contexts, presenting research or arguments clearly and persuasively during debates and community forums.
- Determine an author's purpose and evaluate reasoning and evidence, particularly in argumentative and persuasive texts related to environmental issues.
- Write routinely for various tasks and purposes, including daily journal writing, technical manuals, opinion pieces, and formal essays.

SEVENTH GRADE MATH CURRICULUM

CORE IDEAS AND TOPICS	
SEVENTH GRADE	Proportions, rational numbers, probability, angles, percents. 7.PR.1–7 (Proportional Reasoning), 7.NCC.6–9 (Rational Number Ops), 7.GM.6 (Scale Drawings), 7.SP.1–4 (Data)

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Use proportional reasoning to scale maps, calculate gear ratios, and compare population densities in different environments.
- Apply rational numbers in real-world outdoor contexts such as tracking elevation changes, recording temperatures, and measuring rainfall.
- Analyze wildlife data distributions to identify trends and variability in species populations or habitat conditions.
- Conduct random sampling during field activities to estimate characteristics of larger populations (e.g., plant density, insect count).
- Use probability models to assess likelihoods in outdoor safety planning or environmental scenarios.
- Calculate and compare percentages related to energy use, water conservation, or weather patterns.
- Measure and solve for angles, area, surface area, and volume in the design of shelters, outdoor classrooms, or garden beds.
- Interpret and construct graphs and tables from data collected in nature-based experiments.
- Use estimation and reasoning strategies to check for reasonableness in outdoor measurement and data collection.
- Model and solve multi-step problems that combine ratios, percents, and geometry in realistic outdoor applications.

PERFORMANCE EXPECTATIONS

Students will:

- Analyze proportional relationships and use them to solve real-world problems involving population comparisons, distance calculations, and resource management in natural settings.

- Apply operations with rational numbers to solve practical problems involving temperature change, elevation gain/loss, and outdoor budgets.
- Draw inferences about populations using data from field sampling, including measures of center and variability (mean, median, range, IQR).
- Use probability models (both theoretical and experimental) to evaluate the likelihood of natural events (e.g., rain chance, animal sightings).
- Solve real-life problems involving percent (e.g., percent increase/decrease in rainfall, trail completion progress).
- Calculate angle measures and geometric properties when designing and evaluating outdoor structures, shelters, or navigation paths.
- Determine surface area and volume for practical outdoor contexts like water tanks, storage containers, or garden plots.
- Interpret and analyze data displays (e.g., histograms, box plots, scatterplots) derived from environmental investigations.
- Use algebraic reasoning to solve equations and inequalities arising from conservation scenarios or outdoor challenges.
- Develop and use mathematical models to describe relationships between variables in environmental contexts (e.g., plant growth over time, runoff patterns).

SEVENTH GRADE SOCIAL STUDIES CURRICULUM

CORE IDEAS AND TOPICS	
SEVENTH GRADE	**World Civilizations 1500–Present:** G.7.1–7.7, CG.7.1–7.5, E.7.1–7.4, H.7.1–7.6

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Analyze how geography, technology, and exploration shaped global interactions and empires from 1500 to the present.
- Describe how political revolutions and social movements impacted societies and governance.
- Evaluate economic changes such as mercantilism, industrialization, and globalization.
- Examine how human-environment interactions changed over time and across regions.
- Engage in debates or simulations focused on ethical leadership and environmental decisions through history.

PERFORMANCE EXPECTATIONS

- Use spatial tools to evaluate colonization, trade routes, and conflict zones (G.7.1–7.7).
- Assess the evolution of governmental systems and civic participation globally (CG.7.1–7.5).

- Examine global economic trends, including environmental impacts of production and consumption (E.7.1–7.4).
- Investigate historical themes such as imperialism, revolution, and reform from a global perspective (H.7.1–7.6).
- Participate in simulations such as international summits or historical reenactments of outdoor expeditions.

EIGHTH GRADE CURRICULUM

CORE IDEAS AND TOPICS			
	PHYSICAL SCIENCES	**LIFE SCIENCES**	**EARTH & SPACE SCIENCES**
EIGHTH GRADE	Forces, motion, and properties of matter; real-world examples include friction in hiking gear or energy conservation in survival contexts. 8-PS2, 8-PS3, 8-PS4	Heredity, genetics, and the role of natural selection in the adaptation of species. 8-LS3, 8-LS4	Earth's geological history, atmospheric patterns, climate science, and catastrophic events. 8-ESS1

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Investigate how forces and motion impact safety and survival.
- Analyze how genetic variation influences adaptation.
- Evaluate climate hazards and design response strategies.
- Create and refine engineering solutions for environmental threats.

PERFORMANCE EXPECTATIONS

Physical Sciences (PS)

- Investigate how motion, force, and mass influence safety equipment and outdoor mobility.
- Use Newton's laws to analyze environmental rescue systems and wilderness survival tools.

Life Sciences (LS)

- Study heredity, genetic variation, and evolution. Field studies include observations of species adaptations and trait mapping.

Earth and Space Sciences (ESS)

- Examine geologic time, catastrophic events, and their impact on the biosphere. Activities include hazard zone mapping and climate scenario analysis.

Engineering, Technology, and Applications of Science (ETS)

- Focus on emergency response engineering challenges—students prototype and refine shelters, evacuation tools, and communication systems to respond to realistic scenarios.

At AOA, eighth grade students build on earlier skills to apply the full range of engineering performance expectations (MS-ETS1-1 to MS-ETS1-4) in higher-stakes, community-facing projects. Their work includes evaluating environmental threats, engineering emergency solutions, and using peer feedback to optimize designs. Students are guided to integrate mapping tools, scientific data, and user needs into their proposals and demonstrate the capacity to adapt, justify, and improve their designs in outdoor conditions.

First Responder & Outdoor Safety

- Disaster prep kits
- CPR training
- Emergency shelter prototypes

Outdoor Project Focus

- Local hazard maps
- Safety drills
- Species adaptation observations

EIGHTH GRADE ELA CURRICULUM

CORE IDEAS AND TOPICS	
EIGHTH GRADE	Environmental policy debates, disaster response narratives, technical protocols. RI.8.1–10, W.8.1–10, SL.8.1–6, L.8.1–6

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Evaluate claims and reasoning in environmental policy documents or public debates.
- Compose technical writing such as disaster preparedness guides, wilderness safety checklists, or incident reports with clarity and precision.
- Develop and present multimedia presentations summarizing research on natural disasters, recovery efforts, or ecological impact studies.
- Write and revise narratives based on survival and disaster scenarios, incorporating figurative language, pacing, and dialogue.
- Analyze scientific and technical processes through clear explanatory writing tied to outdoor experiences (e.g., water purification, first aid).
- Conduct structured peer reviews to improve clarity, tone, and evidence in argumentative and informative writing.
- Maintain a field communication journal, documenting outdoor simulations, response plans, or observations of environmental events.
- Use annotation strategies to break down complex nonfiction texts and government documents related to emergency management.
- Compare and contrast conflicting viewpoints in media texts on environmental topics or crisis response.
- Adapt writing and speech for different audiences, such as peers, instructors, or community stakeholders in presentations or emergency planning.

PERFORMANCE EXPECTATIONS

Students will:

- Delineate and evaluate arguments and specific claims in a text, assessing the soundness of reasoning and the relevance and sufficiency of evidence, particularly in policy-related or environmental debate contexts.

- Write informative/explanatory texts, including those that clearly describe scientific procedures or technical protocols, using appropriate transitions, formatting, and domain-specific vocabulary.
- Present claims and findings in a focused, coherent manner, emphasizing key points with logical sequencing and relevant evidence during oral reports and policy simulations.
- Develop and organize writing for a variety of tasks (e.g., manuals, public service announcements, research articles), adjusting tone and style to purpose and audience.
- Draw evidence from literary or informational texts to support analysis, reflection, and response to current environmental challenges or disaster preparedness.
- Demonstrate command of grammar, usage, and mechanics in all writing, with particular emphasis on clarity in technical and explanatory texts.
- Use digital tools to produce polished documents (e.g., policy briefs, emergency guides) and collaborate with others during peer-reviewed writing tasks.
- Participate in structured discussions or simulations, such as town hall debates or emergency drills, using prepared notes and evidence to articulate a position.
- Integrate visual information (e.g., maps, charts, infographics) in presentations and documents to enhance understanding of complex information.
- Respond constructively to feedback to revise and improve writing for clarity, impact, and logical progression.

EIGHTH GRADE MATH CURRICULUM

CORE IDEAS AND TOPICS	
EIGHTH GRADE	Scientific notation, linear equations, functions, geometry, bivariate data. 8.FN.1–9 (Functions & Linear Relationships), 8.SP.1–2 (Scatterplots), 8.GM.1 (Measurement), 8.ALG.1–2 (Equations)

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Interpret and use scientific notation to analyze environmental and scientific data involving very large or small quantities (e.g., distance to natural landmarks, microscopic organisms).
- Solve and graph linear equations representing changes in temperature, elevation, or supply usage in survival simulations.
- Model functions to represent relationships between environmental variables, such as temperature vs. plant growth or hours of daylight vs. energy consumption.
- Analyze bivariate data sets collected during fieldwork (e.g., rainfall vs. erosion, time vs. trail distance).
- Apply geometry concepts to design efficient outdoor shelters, layout garden plots, or navigate using coordinate systems.
- Use distance, angle, and area formulas to calculate space use and land coverage in outdoor projects.
- Translate real-world survival and environmental challenges into systems of equations to find optimal solutions.
- Evaluate rates of change in climate and population trends using slope interpretation.
- Create and interpret scatterplots to identify patterns and make predictions based on field data.
- Integrate math into emergency logistics planning such as route optimization, resource distribution, and time management under constraints.

PERFORMANCE EXPECTATIONS

Students will:

- Understand and apply scientific notation to represent and compare quantities in environmental science contexts, including natural disaster impact or population models.
- Solve and interpret linear equations and inequalities arising from real-world outdoor scenarios, such as resource usage over time or elevation gain during a hike.
- Use functions to model relationships between quantities, such as predicting how temperature affects animal behavior or plant cycles.

- Analyze functional relationships by interpreting graphs, tables, and equations in context (e.g., graphing growth patterns from environmental data).
- Investigate and interpret patterns of association in bivariate data, including linear relationships and clustering using scatterplots from field research.
- Construct and solve systems of equations to represent and reason through multivariable environmental or survival situations (e.g., balancing food and water supplies).
- Understand and apply the Pythagorean Theorem in map-based navigation and distance estimation during outdoor exploration.
- Use volume and surface area formulas to evaluate practical outdoor problems like storage efficiency, water collection tanks, or survival gear packaging.
- Interpret the slope and y-intercept of linear functions in context (e.g., rate of temperature drop, seedling growth per day).
- Use technology and digital tools (e.g., spreadsheets, graphing apps) to model, analyze, and present mathematical solutions related to outdoor and environmental data.

EIGHTH GRADE SOCIAL STUDIES CURRICULUM

CORE IDEAS AND TOPICS	
EIGHTH GRADE	**U.S. History Through Reconstruction:** G.8.1–8.6, CG.8.1–8.5, E.8.1–8.4, H.8.1–8.6

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Explain how geography influenced the development of regional identities, economies, and conflicts in U.S. history.
- Describe the evolution of American democratic ideals and how they were challenged and expanded.
- Analyze how historical events shaped American economic systems and land use.
- Interpret how human-environment interactions influenced key events like westward expansion and industrialization.
- Draw connections between past social movements and current civic engagement.

PERFORMANCE EXPECTATIONS

- Analyze maps, migration patterns, and territorial expansion (G.8.1–8.6).
- Evaluate founding documents, government structures, and the evolution of civil rights (CG.8.1–8.5).
- Study economic shifts from colonial trade to early industrialization and their impacts on labor and land (E.8.1–8.4).
- Interpret key historical events from colonization through Reconstruction, including the Civil War (H.8.1–8.6).
- Demonstrate understanding through debates, local history trail development, or outdoor primary source scavenger hunts.

NINTH GRADE CURRICULUM

CORE IDEAS AND TOPICS			
	PHYSICAL SCIENCES	**LIFE SCIENCES**	**EARTH & SPACE SCIENCES**
NINTH GRADE	Chemistry of natural environments, energy transformations, and Newtonian mechanics in search and rescue applications	Human biology, public health, and physiological adaptation to outdoor challenges.	Sustainability, energy cycles, and ecosystem dynamics measured through environmental field studies.

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Analyze physical and chemical processes in field safety applications.
- Investigate human body systems and health in outdoor environments.
- Design sustainable models for environmental use and tourism.
- Demonstrate mastery in outdoor engineering through capstone project-based learning.

PERFORMANCE EXPECTATIONS

Physical Sciences (PS)

- Apply physics and chemistry concepts to outdoor contexts, such as force analysis in search-and-rescue and chemical analysis of soil and water samples.
- Analyze energy systems and chemical reactions related to environmental health and emergency preparedness.

Life Sciences (LS)

- Explore human anatomy and physiology with an emphasis on environmental health. Field labs assess physiological responses to temperature, hydration, and exertion.

Earth and Space Sciences (ESS)

- Evaluate sustainability practices, energy cycles, and biogeochemical processes using data collected from Arkansas ecosystems.

Engineering, Technology, and Applications of Science (ETS)

- Engage in capstone-level engineering design challenges where students manage multi-variable constraints and lead peer review evaluations. Final designs are implemented in real field environments

By ninth grade at AOA, students consistently demonstrate advanced understanding of the full ETS1 standard set (9-ETS1-1 through 9-ETS1-4). Their capstone projects are student-led and rooted in real-world scenarios, integrating quantitative analysis, sustainability constraints, and presentation of results to authentic audiences. These projects reflect the highest level of iterative problem-solving, from field prototyping and testing to solution presentation and reflection, positioning students for success in STEM careers and leadership in outdoor industries.

First Responder & Outdoor Safety

- First aid instruction and leadership
- CPR certification
- Capstone simulation projects

Outdoor Project Focus

- Safety events
- Ecotour design
- Credentialing and scenario-based drills

NINTH GRADE ELA CURRICULUM

CORE IDEAS AND TOPICS	
NINTH GRADE	Environmental ethics, outdoor industry impact, research and technical writing.

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Synthesize arguments from multiple print and multimedia sources on topics like conservation policy or outdoor recreation ethics.
- Write technical and professional documents, including proposals, incident reports, response protocols, and environmental summaries.
- Analyze seminal U.S. and environmental documents, connecting them to modern environmental dilemmas and legal frameworks.
- Conduct independent research using reliable academic, governmental, and environmental data sources to address complex questions.
- Present oral arguments or field briefings using structured reasoning, credible sources, and visual supports.
- Maintain a professional field notebook or communication log, documenting activities, observations, and protocol compliance.
- Use rhetorical strategies such as appeals to logic, emotion, and ethics when crafting persuasive or policy-based texts.
- Evaluate the credibility and relevance of sources, distinguishing between peer-reviewed research, government reports, and opinion.
- Use domain-specific vocabulary and academic language to write and speak with precision in outdoor and environmental contexts.
- Collaborate with peers to plan, draft, and revise group writing projects such as trail signage, eco-tourism brochures, or stewardship proposals.

PERFORMANCE EXPECTATIONS

Students will:

- Analyze seminal U.S. and environmental texts (e.g., *Silent Spring*, the Clean Air Act, the Wilderness Act) for central ideas, rhetorical structure, and impact on public policy.
- Write arguments to support claims with clear reasoning, relevant evidence, and effective organization suited to real-world environmental or outdoor issues.

- Integrate and evaluate multiple sources of information presented in diverse formats (e.g., print, maps, satellite imagery, digital dashboards) to develop comprehensive positions.
- Compose informative/explanatory texts that clearly convey complex ideas such as trail design standards, risk management plans, or environmental impact assessments.
- Present information, findings, and supporting evidence clearly and logically, using appropriate tone, pacing, and multimedia components during field briefings or public speaking engagements.
- Demonstrate command of the conventions of standard English grammar and usage in technical and academic writing.
- Draw evidence from literary and informational texts to support analytical writing on environmental themes and outdoor industry developments.
- Develop and strengthen writing through the writing process, including peer review, with a focus on field accuracy, clarity, and purpose.
- Adapt writing and speaking for varied audiences and purposes, including professional communication with park rangers, tourists, peers, and policymakers.
- Conduct sustained research projects to solve a real-world problem, defend a policy recommendation, or propose an ethical solution to an environmental challenge.

NINTH GRADE MATH CURRICULUM

CORE IDEAS AND TOPICS	
NINTH GRADE	Algebra, linear and exponential functions, applied geometry, risk statistics. A1.LFE.1, A1.LFE.4, A1.LFE.9–10, A1.LFE.20 (Linear equations, interpreting rate of change, modeling with functions)

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Build and interpret linear and exponential functions to model real-world environmental and outdoor patterns (e.g., deforestation rates, gear depreciation, tourism impact).
- Apply algebraic reasoning to solve real-life problems in outdoor logistics (e.g., ration distribution, supply constraints).
- Use geometry and spatial reasoning to design safe and efficient campsite layouts, trails, and rescue response zones.
- Analyze risk probabilities and environmental statistics to make informed decisions in emergency planning.
- Compare and contrast function types (linear, quadratic, exponential) based on real-world data collected through field studies.
- Use mathematical tools and graphing technology to visualize trends in natural systems (e.g., stream flow over time, species population shifts).
- Construct and analyze systems of equations and inequalities representing outdoor constraints (e.g., time vs. distance, cost vs. quantity).
- Calculate and interpret descriptive statistics (mean, standard deviation, percentiles) to evaluate field data (e.g., weather, trail conditions).
- Understand and apply right triangle trigonometry and the Pythagorean Theorem to solve problems in mapping and navigation.
- Justify mathematical solutions and communicate findings in both written technical documents and verbal field briefings.

PERFORMANCE EXPECTATIONS

Students will:

- Interpret the structure of algebraic expressions, and write, solve, and graph equations that represent environmental or logistical relationships (e.g., rainfall runoff, fuel consumption).
- Create and compare linear, exponential, and quadratic functions to model changes in outdoor systems or survival resource planning scenarios.

- Model and solve real-world problems involving systems of equations and inequalities, including environmental constraints, field operations, or budget planning.
- Use geometry concepts and formulas (e.g., volume, area, surface area, distance, and angles) to plan shelter structures, evacuation routes, and field layouts.
- Apply trigonometric ratios and geometric reasoning in context (e.g., estimating tree height, slope steepness, or drone flight paths).
- Use and interpret descriptive statistics (e.g., standard deviation, outliers, variability) to summarize and analyze environmental and risk-related data.
- Apply concepts of probability and conditional probability to assess and manage risks in natural hazards, weather forecasts, and gear failure rates.
- Use mathematical modeling tools (e.g., spreadsheets, graphing calculators, simulations) to test and revise predictions about outdoor trends.
- Represent and interpret data visually using scatterplots, histograms, boxplots, and residual plots for field-based research.
- Communicate mathematical reasoning in written and oral formats, including presentations, technical briefings, and data reports relevant to outdoor operations.

NINTH GRADE SOCIAL STUDIES CURRICULUM

CORE IDEAS AND TOPICS	
NINTH GRADE	**Civics, Econ, World History, or Human Geography:** CG.9.1–9.7, E.9.1–9.6, G.9.1–9.7, H.9.1–9.6

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Demonstrate understanding of civic responsibilities, individual rights, and government structures at all levels.
- Analyze economic principles and their application to personal finance, public policy, and environmental sustainability.
- Evaluate historical patterns of conflict, cooperation, and change from a global perspective.
- Apply geographic concepts to understand resource distribution, human-environment interaction, and population trends.
- Use critical thinking to assess contemporary global issues through informed civic action and outdoor inquiry.

PERFORMANCE EXPECTATIONS

- Analyze the structure and function of U.S. and world governments and legal systems (CG.9.1–9.7).
- Interpret economic systems, cost-benefit analysis, and budgeting with real-world applications (E.9.1–9.6).
- Evaluate how geography influences political, cultural, and environmental outcomes (G.9.1–9.7).
- Synthesize historical perspectives on globalization, conflict, and diplomacy (H.9.1–9.6).
- Present solutions to real-world challenges through projects like mock UN sessions, budget planning for park systems, or mapping sustainable land use.

SIXTH GRADE SCIENCE CURRICULUM

CORE IDEAS AND TOPICS			
	PHYSICAL SCIENCES	**LIFE SCIENCES**	**EARTH & SPACE SCIENCES**
SIXTH GRADE	Energy transfer in natural systems. 6-PS3	Structure and function of cells, body systems, reproduction. 6-LS1, 6-LS3	Weather, climate, human impacts, water cycle. 6-ESS2, 6-ESS3

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Analyze and summarize key ideas from scientific texts.
- Write narratives and arguments using evidence.
- Conduct short research projects tied to environmental themes.

PERFORMANCE EXPECTATIONS

Physical Sciences (PS)

Students explore how energy is transferred within and between systems. They develop models and explanations related to motion, particle behavior, and thermal energy in natural contexts.

Life Sciences (LS)

Students investigate cellular structures and their functions, body systems as interactive subsystems, and how organisms grow, develop, and reproduce. Outdoor labs include pond water cell observations and comparative growth studies of local plants.

Earth and Space Sciences (ESS)

Focuses on the cycling of water, atmospheric processes, and the effects of human activity on ecosystems. Students track local weather, analyze watershed data, and model the impact of human land use on nearby environments.

Engineering, Technology, and Applications of Science (ETS)
Students begin iterative engineering design using outdoor problems. They define challenges such as trail erosion or stormwater management, propose solutions, test materials, and optimize their designs using Arkansas environments as laboratories.

- Develop precision in identifying engineering problems with environmental and social impact.
- Use tools and testing cycles to improve outdoor-related designs (e.g., runoff collection systems, eco-shelters).
- Understand the role of ethical and sustainable decision-making in solving real-world design problems.

At AOA, sixth grade students begin to demonstrate mastery of the full set of engineering performance expectations (MS-ETS1-1 to MS-ETS1-4). Through real-world outdoor challenges, they use tools and natural materials to define problems, build models, test ideas, and communicate optimized solutions. The design process is fluid, students are encouraged to revise and refine as needed, reflecting the unpredictable and iterative nature of working in the field.

First Responder & Outdoor Safety

- Basic first aid
- Personal and field safety plans
- SAR communication basics

Outdoor Project Focus

- Nature journals
- Weather station setup
- Trail signage design

SIXTH GRADE ELA CURRICULUM

CORE IDEAS AND TOPICS	
SIXTH GRADE	Informational texts on ecosystems, narrative writing based on outdoor survival, persuasive writing on conservation, and research on local tourism. RI.6.1–10, RI.6.2–6.6 W.6.1–10, SL.6.1–6, L.6.1–6, L.6.4–6.5, L.6.1–2, W.6.5

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Analyze and summarize key ideas from scientific and informational texts related to ecosystems, weather patterns, and conservation.
- Write compelling narratives grounded in real or imagined outdoor scenarios, demonstrating effective use of sensory language and plot structure.
- Develop persuasive writing that takes a stance on environmental or conservation issues, supported with logical reasoning and evidence.
- Conduct short and extended research projects on regional outdoor topics (e.g., Ozark wildlife, tourism impact), using multiple sources.
- Use academic and domain-specific vocabulary accurately in writing and discussions.
- Keep and maintain a nature journal to reflect observations, draw inferences, and pose questions during outdoor learning experiences.
- Use multimedia and visual aids (e.g., maps, timelines, field sketches) to support oral presentations and written work.
- Practice peer feedback and self-assessment to revise and strengthen writing.
- Identify bias and evaluate the credibility of sources when researching environmental issues.

PERFORMANCE EXPECTATIONS

Students will:

- Cite textual evidence to support analysis of scientific and technical texts, especially those related to natural ecosystems and environmental concerns.
- Produce clear, coherent writing (narrative, informational, and argumentative) that is appropriate to task, purpose, and audience, with attention to structure and transition.
- Engage effectively in a range of collaborative discussions with diverse partners (in class or in the field), building on others' ideas, clarifying misunderstandings, and expressing their own clearly.
- Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings relevant to science and outdoor contexts.

- Integrate information presented in different media or formats (e.g., maps, charts, photographs, nature sketches) to develop a coherent understanding of a topic or issue.
- Write routinely over extended time frames (e.g., research projects, narratives) and shorter time frames (e.g., field notes, journal entries) for a range of tasks and purposes.
- Gather relevant information from multiple print and digital sources, assess the credibility of each source, and quote or paraphrase the data accurately.
- Use technology and digital tools to produce and publish writing and to interact and collaborate with others, including during outdoor data collection projects.
- Draw evidence from literary or informational texts to support analysis, reflection, and research on conservation and tourism themes.
- Participate in real-world writing tasks such as letters to local government, informational brochures for parks or trails, or blog entries about outdoor experiences.

SIXTH GRADE MATH CURRICULUM

CORE IDEAS AND TOPICS	
SIXTH GRADE	Ratios, decimals, statistics, geometry, and percentages with outdoor applications 6.PR.1–5 (Ratios & Rates), 6.NCC.5–10 (Decimal/Fraction Ops), 6.GM.1–7 (Geometry & Measurement), 6.SP.1–9 (Statistics)

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Use ratios to describe relationships in environmental data (e.g., predator/prey ratios, plant population densities).
- Calculate unit rates for real-life scenarios (e.g., calories burned per mile hiked, water usage per activity).
- Interpret and create data displays (bar graphs, line plots, box plots) from field observations and experiments.
- Use percentages to describe parts of a whole in natural systems (e.g., percentage of leaf coverage, water clarity samples).
- Convert between measurement units (e.g., inches to centimeters, feet to meters) in fieldwork and trail mapping.
- Apply area and perimeter formulas to outdoor spaces such as campsites, school gardens, or nature plots.
- Identify and measure angles in natural and constructed environments (e.g., trail bends, shelter structures).
- Analyze measures of center (mean, median, mode) and variability (range, interquartile range) using collected outdoor data.
- Solve multi-step problems involving decimals, fractions, and percentages in context (e.g., budgeting for a field trip).
- Estimate and measure length, volume, and mass using appropriate tools during outdoor labs and explorations.
- Develop and use mathematical models to predict environmental outcomes or simulate conservation efforts.
- Collaborate in groups to interpret mathematical problems and data related to environmental scenarios.

PERFORMANCE EXPECTATIONS

Students will:

- Apply and extend understanding of ratios and rates to solve real-world and mathematical problems, including wildlife population analysis and gear comparisons.
- Use proportional relationships to solve multistep ratio and percent problems related to trail distances, elevation changes, and outdoor resource allocation.
- Analyze environmental data using statistical measures such as mean, median, mode, range, and interquartile range.
- Create and interpret graphs and plots (line plots, histograms, box plots) based on data collected through outdoor investigations.
- Solve real-world problems involving decimals, fractions, and percentages, such as trail mix recipes, packing proportions, and field data summaries.
- Convert measurement units within and between systems (e.g., metric and customary) in fieldwork involving distance, weight, and volume.
- Apply geometry concepts—including area, perimeter, surface area, and volume—to solve practical problems related to designing campsites, shelters, or mapping trails.
- Use coordinate planes and plotting to represent real-world locations and track outdoor exploration data.
- Solve word problems involving measurement and data, incorporating tools like compasses, protractors, and GPS coordinates.
- Justify mathematical reasoning and critique others' arguments during collaborative problem-solving in field-based settings.
- Use mathematical tools and technology (e.g., digital scales, GPS, Google Sheets) to support data collection, analysis, and presentation.
- Construct and communicate mathematical arguments related to environmental conservation, tourism trends, and land usage using quantitative evidence.

SIXTH GRADE SOCIAL STUDIES CURRICULUM

CORE IDEAS AND TOPICS	
SIXTH GRADE	**World Civilizations to 1500:** Geography (G.6.1–6.7), Civics/Government (CG.6.1–6.5), Economics (E.6.1–6.4), History (H.6.1–6.6)

GRADE LEVEL LEARNING TARGETS

By the end of grade level students can:

- Locate and describe major world civilizations and geographic features that shaped human settlement and cultural development before 1500.
- Explain the structure and functions of early governments and how they compare to modern systems.
- Analyze how natural resources and trade influenced economic systems in ancient and medieval societies.
- Use maps, timelines, and primary sources to examine historical events and cause/effect relationships.
- Connect early innovations and philosophies to modern environmental and leadership practices.

PERFORMANCE EXPECTATIONS

- Identify how geography influenced the development of civilizations like Mesopotamia, Egypt, and China (G.6.1–6.7).
- Compare and contrast government systems from early civilizations (CG.6.1–6.5).
- Evaluate the role of trade, agriculture, and natural resources in early economies (E.6.1–6.4).
- Analyze the rise and fall of civilizations, exploring the legacies they left behind (H.6.1–6.6).
- Apply understanding through projects such as building early civilization models, conducting mock archaeological digs, or mapping trade routes in outdoor simulations.

Time Frame	ELA (Savvas)	Math (McGraw-Hill)	Science (Twig)	Social Studies (Traverse)	First Responder / Safety	Outdoor Project Focus	Standards Alignment
Weeks 1–5	Analyzing Informational Texts on Natural Disasters	Scientific Notation & Proportional Reasoning	Natural Disasters, Forces & Earth's Systems	Founding Documents and American Ideals	Emergency Kits & Disaster Preparedness	Create & Present Personal Safety Plans	ELA: 8.RI.1, 8.RI.4, 8.RI.9, 8.W.2 | Math: AR.Math.Content.8.EE.A.3–4, 8.EE.B.5–6 | Science: NGSS: MS-ESS2-2, MS-ESS3-2, Social Studies: H.8.1, C.C.8.1
Weeks 6–10	Narrative Writing: Resilience & Outdoor Challenges	Linear Equations & Real-World Applications	Climate Change: Human Impact & Mitigation	Revolution and Formation of a Nation	Flood & Fire Safety Protocols	Simulate Response to Local Natural Disaster	ELA: 8.W.3, 8.RL.3, 8.RL.5 | Math: AR.Math.Content.8.EE.C.7–8 | Science: NGSS: MS-ESS3-3, MS-ESS3-5, Social Studies: H.8.2–H.8.3
Weeks 11–15	Evaluating Arguments in Environmental Policy	Functions & Data Models for Climate/Weather	Weather & Climate Systems	Westward Expansion and Impact on Indigenous Peoples	Evacuation Planning & Simulation	Develop Community Hazard Maps	ELA: 8.RI.8, 8.W.1, 8.W.9 | Math: AR.Math.Content.8.F.A.1–3, 8.F.B.4–5 | Science: NGSS: MS-ESS2-5, MS-ESS3-1, Social Studies: H.8.4–8.5
Weeks 16–20	Research Projects on Local Environmental Hazards	Volume & Surface Area in Rescue Planning	Engineering for Hazard Resilience	Civil War Causes and Consequences	CPR Recertification & Drill Facilitation	Design Emergency Shelter Prototypes	ELA: 8.W.7, 8.W.8, 8.W.2 | Math: AR.Math.Content.8.G.C.7, 8.G.C.9 | Science: NGSS: MS-ETS1-1, MS-ETS1-2, Social Studies: H.8.6–8.7
Weeks 21–25	Technical Manuals: Emergency Protocols & First Aid	Bivariate Data & Trend Analysis	Genetics, Traits, & Survival in the Wild	Reconstruction and Change	Triage & Basic First Responder Roles	Field Observations of Species Adaptations	ELA: 8.RI.3, 8.RI.4, 8.W.4 | Math: AR.Math.Content.8.SP.A.1–4 | Science: NGSS: MS-LS3-1, MS-LS3-2, Social Studies: H.8.8–8.9
Weeks 26–30	Reflective Writing: Field Experiences & Growth	System of Equations in Resource Allocation	Energy Transfer in Ecosystems	Civic Responsibility & Rights	Outdoor Rescue Coordination	Build Outdoor Energy Demonstrations	ELA: 8.W.4, 8.SL.4 | Math: AR.Math.Content.8.EE.C.8 | Science: NGSS: MS-LS2-3, MS-LS2-4, MS-PS3-3, Social Studies: C.C.8.2–8.5
Weeks 31–35	Portfolio Development & Practice Presentations	Comprehensive Review via Capstone Planning	Scientific Planning for Capstone Projects	Review & Capstone Planning	Peer-led Safety Instruction Design	Prepare Capstone Projects	ELA: 8.SL.4, 8.W.5, 8.W.6 | Math: Integrated Math Review (RP, EE, G, SP) | Science: NGSS: Science & Engineering Practices, Social Studies: All 8th SS standards
Weeks 36–40	Capstone Presentation & Outdoor Literacy Showcase	Capstone Data Presentations	Science Symposium & Public Showcase	Capstone Projects & Liberty Walk	Responder Leadership & Final Evaluations	Outdoor Safety & Preparedness Expo	ELA: 8.SL.5, 8.W.8, 8.W.10 | Math: AR.Math.Content.8.SP.A.4, 8.EE.C.8c | Science: NGSS: Scientific Communication & Performance Expectations, Social Studies: All 8th SS standards

Time Frame	ELA (Savvas)	Math (McGraw-Hill)	Science (Twig)	Social Studies (Traverse)	First Responder / Safety	Outdoor Project Focus	Standards Alignment
Weeks 1–5	Nature Journaling & Informational Texts (Ecosystem Focus)	Ratios, Rates, and Data Collection in Nature	Ecosystems, Energy Flow, and Interdependence	Geography of Early Civilizations: Landforms, Climate, and Settlement	Basic First Aid & Personal Safety Plans	Field Journals & Nature Observation Logs	ELA: 6.R.7.P, 6.W.11.P | Math: AR.Math.Content.6.RP.A.1–3 | Science: NGSS MS-LS2-1, MS-ESS3-3, Social Studies: G.6.1–6.7
Weeks 6–10	Narrative Writing: Wilderness Survival Stories	Decimals, Measurement, and Environmental Graphing	Water Cycle, Weather Patterns, and Climate	Government Systems in Ancient Societies	Bleeding Control & Emergency Response	Build & Measure Local Trail Maps	ELA: 6.W.10.N, 6.R.2.I | Math: AR.Math.Content.6.NS.B.3, 6.SP.B.4 | Science: NGSS MS-ESS2-4, MS-ESS2-5, Social Studies: CC.6.1–6.5
Weeks 11–15	Comparative Texts on Habitats & Biomes	Statistics in Wildlife Trends (Mean, Median, Mode)	Soil, Rocks, and Environmental Change	Trade, Agriculture, and Resources in Ancient Economies	Wilderness Safety: Shelter, Weather, Navigation	Weather Station & Pattern Tracking	ELA: 6.R.6.P, 6.SL.1.2.CC | Math: AR.Math.Content.6.SP.A.2–3, 6.SP.B.5 | Science: NGSS MS-ESS2-4, MS-ESS3-2, Social Studies:
Weeks 16–20	Persuasive Writing: Conservation Topics	Geometry in Trail Mapping (Angles, Area, Scale)	Plant & Animal Adaptations for Survival	Rise and Fall of Major Civilizations (Mesopotamia, Egypt, China)	SAR Basics: Communication & Grid Searches	Mock Search and Rescue (SAR) Scenario	ELA: 6.W.12.R, 6.R.2.P | Math: AR.Math.Content.6.G.A.1, 6.G.A.3–4 | Science: NGSS MS-LS1-4, MS-LS2-2, Social Studies: E.6.1–6.4
Weeks 21–25	Research Writing: Local Tourism & Environmental Issues	Percents and Resource Budgeting	Human Body Systems and Outdoor Health	Primary Sources and Timeline Analysis	Disaster Preparedness & Community Response	Trailside Signage & Info Kiosk Design	ELA: 6.R.5.P, 6.W.11.P | Math: AR.Math.Content.6.RP.A.3 | Science: NGSS MS-LS1-3, Social Studies: H.6.1–6.6
Weeks 26–30	Poetry & Reflection: Outdoor Experiences	Intro to Equations with Environmental Data	Scientific Inquiry and Field Investigations	Legacy of Innovations and Beliefs	CPR / AED Training & Peer Education	Field First Aid Stations / Peer Teaching	ELA: 6.W.4.P, 6.W.6.R | Math: AR.Math.Content.6.EE.A.1–4, 6.EE.B.5–8, 6.EE.C.9 | Science: NGSS Science & Engineering Practices, Social Studies: G.6.1–G.7, H.6.1–6.6
Weeks 31–35	Portfolio Development & Year-End Review	Review, Field-Based Math Projects	Capstone Science Fair Planning	Review & Capstone Preparation	Safety Drill Design & Practice	Capstone Project Development	ELA: 6.SL.1.CC, 6.W.2.P | Math: Review of All Standards | Science: Capstone Planning, Social Studies: H.6.1–6.6
Weeks 36–40	Final Presentations & Community Literacy Showcase	Final Data Presentations & Reflections	Science Fair Presentations & Outdoor Symposium	Capstone Presentation & Ancient Cultures Fair	Responder Expo and Certification Review	Outdoor Education Celebration & Demonstration	ELA: 6.W.6.R, 6.SL.2.CC | Math: AR.Math.Content.6.SP.B.4–5 | Science: NGSS MS-ESS3-3, Social Studies: All 6th SS standards

Time Frame	ELA (Savvas)	Math (McGraw-Hill)	Science (Twig)	Social Studies (Traverse)	First Responder / Safety	Outdoor Project Focus	Standards Alignment ELA and Math	Science Standards (NGSS)
Weeks 1–5	Analyzing Informational Texts: Environmental Issues	Ratios, Proportions & Real-World Applications	Ecosystems & Human Impact	Geography of the Western Hemisphere	Wilderness First Aid & Field Safety Plans	Environmental Journaling & Impact Logs	ELA: 7.RI.1, 7.RI.4, 7.RI.8, 7.W.2, 7.W.9 | Math: AR.Math.Content.7.RP.A.1–3, Social Studies: G.7.1–7.6	NGSS: MS-LS2-1, MS-LS2-4 (Ecosystem Dynamics & Human Impact)
Weeks 6–10	Narrative Writing: Outdoor Adventure & Rescue	Operations with Rational Numbers & Measurement	Water Systems & Watershed Models	Government and Civics in the Western Hemisphere	Scenario-Based Emergency Response	Create Emergency Response Maps	ELA: 7.W.3, 7.W.4, 7.RL.3, 7.RL.5 | Math: AR.Math.Content.7.NS.A.1–3, 7.EE.B.3, Social Studies: G.7.1–7.5	NGSS: MS-ESS2-4, MS-ESS3-1 (Water Systems & Human Impact)
Weeks 11–15	Evaluating Arguments: Conservation Debates	Data Distribution & Probability in Nature	Earth's Layers, Plate Tectonics & Landforms	Economics: Resources, Trade, and Human Impact	Navigation: Compass, GPS, Map Reading	Conduct Local Geological Surveys	ELA: 7.RI.8, 7.W.1, 7.W.9 | Math: AR.Math.Content.7.SP.A.1–2, 7.SP.B.3–4, Social Studies: E.7.1–7.5	NGSS: MS-ESS2-1, MS-ESS2-2, MS-ESS2-3 (Earth's Surface & Plate Tectonics)
Weeks 16–20	Research Writing: Local Species & Habitats	Scale Drawings, Angles & Area	Climate, Weather & Environmental Hazards	Historical Case Studies in the Americas	Search & Rescue Protocols & Communication	Weather Logs & Forecasting Models	ELA: 7.W.7–8, 7.W.2, 7.RI.8 | Math: AR.Math.Content.7.G.A.1, 7.G.B.5–6, Social Studies: H.7.1–7.6	NGSS: MS ESS3 2, MS ESS2 5 (Weather & Climate Hazards)
Weeks 21–25	Technical Reading: Maps & Wilderness Manuals	Solving Problems with Percents	Natural Resources & Sustainability	Indigenous Cultures and Environmental Ethics	Evacuation Procedures & Disaster Planning	Design Eco-Friendly Campsites	ELA: 7.RI.3–4, 7.RST.7, 7.W.6 | Math: AR.Math.Content.7.RP.A.3, 7.EE.B.3, Social Studies: H.7.2, G.7.3	NGSS: MS-ESS3-3, MS-ESS3-4 (Natural Resources & Sustainability)
Weeks 26–30	Poetry & Personal Reflection in Nature	Equations & Inequalities in Context	Scientific Investigations in Outdoor Contexts	Comparative Cultures and Beliefs	CPR/AED Certification Review & Drills	Student-led Safety Stations	ELA: 7.RL.4, 7.W.4, 7.SL.4 | Math: AR.Math.Content.7.EE.A.1–2, 7.EE.B.4, Social Studies: H.7.4–7.6	NGSS: Science & Engineering Practices (Investigation Design & Data Use)
Weeks 31–35	Portfolio Development & Public Speaking	Integrated Review: Outdoor Math Applications	Capstone Planning: Environmental Investigations	Review & Capstone Prep	Safety Procedures & Event Design	Capstone Project Creation	ELA: 7.SL.4, 7.W.5–6 | Math: Review of RP, NS, EE, G, SP domains, Social Studies: All 7th SS standards	NGSS: Integrative Crosscutting Concepts & Practices (Capstone Planning)
Weeks 36–40	Final Presentations & Cross-Curricular Showcase	Data Analysis Presentations & Capstones	Outdoor Science Fair & Community Engagement	Capstone Projects: Culture and Leadership	Responder Simulations & Certification Projects	Community Event & SAR Showcase	ELA: 7.SL.5, 7.W.8, 7.W.10 | Math: AR.Math.Content.7.SP.B.4, 7.SP.A.1–2, 7.EE.B.3–4, Social Studies: All 7th SS standards	NGSS: Scientific Communication & Performance Expectations (Science Expo)

Time Frame	ELA (Savvas)	Math (McGraw-Hill)	Social Studies	Science (Twig)	First Responder / Safety	Outdoor Project Focus	Standards Alignment
Weeks 1–5	Analyzing Nonfiction: Environmental Policy & Ethics	Algebraic Expressions in Environmental Contexts	Foundations of World Geography & Global Interdependence	Anatomy & Physiology for First Response	First Aid Leadership & Teaching	Environmental Ethics Panel Preparation	ELA: 9.R.3.P, 9.W.11.P | Math: A1.A.S.1, A1.A.S.2 (Algebraic Structure) | Science: Anatomy & Physiology for First Response, Social Studies: G.9.1–9.6
Weeks 6–10	Narrative Writing: Crisis & Community	Linear Equations & Graphing for Field Analysis	Civic Institutions and Government Systems	Public Health & Environmental Safety	Community CPR Certification Projects	Community Safety Event Design	ELA: 9.W.10.N, 9.R.2.L | Math: A1.A.REI.3, A1.A.CED.1 (Linear Equations) | Science: Public Health & Environmental Safety, Social Studies: CG.9.1–9.4
Weeks 11–15	Evaluating Arguments: Outdoor Industry & Impact	Functions in Resource Planning	Global Economics and Resource Distribution	Chemistry of Natural Environments	School Safety Planning & Audits	Design Local Ecotour & Trail Experience	ELA: 9.R.6.P, 9.W.9.A, 9.SL.2.CC | Math: A1.F.IF.1, A1.F.IF.4, A1.F.BF.1 (Functions) | Science: Chemistry of Natural Environments, Social Studies: E.9.1–9.4
Weeks 16–20	Research Project: Local Ecology & Tourism	Geometry in First Response Infrastructure	World History: Human Migrations & Empires	Physics in Search and Rescue	Incident Command & Communication Systems	Create First Aid Curriculum for Middle Grades	ELA: 9.W.12.R, 9.W.11.P | Math: G.CO.A.1, G.MG.A.1, G.GMD.B.3 (Geometry) | Science: Physics in Search and Rescue, Social Studies: H.9.1–9.4
Weeks 21–25	Technical Writing: Safety Protocols & Guides	Statistics & Probability in Risk Assessment	Global Conflicts and Cooperation	Ecology & Biogeochemical Cycles	Disaster Drill Facilitation	Plan & Lead Safety Drill at Local Site	ELA: 9.W.11.P, 9.R.5.P | Math: A1.S.ID.1, A1.S.CP.1 (Statistics) | Science: Ecology & Biogeochemical Cycles, Social Studies: H.9.5–9.6
Weeks 26–30	Reflective Essays: Outdoor Experience & Growth	Budgeting & Optimization for Outdoor Programs	Human Rights and Global Citizenship	Sustainability & Conservation Engineering	Public Health Scenario Planning	Public Service Video or Campaign	ELA: 9.W.6.R, 9.W.4.P | Math: A1.N.Q.1, A1.A.CED.1 (Quantities & Optimization) | Science: Sustainability & Conservation Engineering, Social Studies: CG.9.5, H.9.7
Weeks 31–35	Portfolio & Capstone Planning	Integrated Algebra Review & Capstone Support	Capstone Global Issues Project	Capstone Research & Application	Capstone Program Execution	Capstone Product Development	ELA: 9.W.5.P, 9.SL.1.CC | Math: A1.A.REI.4, A1.A.S.3 (Algebra Review) | Science: Capstone Research & Application, Social Studies: All 9th SS standards
Weeks 36–40	Capstone Presentation & Public Expo	Data Presentations for Capstone Projects	Capstone Presentation & Global Forum	STEM Symposium & Field Demonstrations	Responder Credentialing & Evaluation	Outdoor Learning Fair & Certification Ceremony	ELA: 9.SL.2.CC, 9.W.6.R | Math: A1.S.ID.6, A1.S.ID.7 (Data Analysis) | Science: STEM Symposium & Field Demonstrations, Social Studies: All 9th SS standards

Week	Unit Topic	Standards (LEARNS/AR DOE)	Curriculum Resources	Outdoor Enrichment Activity	ATLAS Prep Focus	Assessment
Week 1	Foundations of Geometry	G.CO.1, G.CO.2	McGraw Hill	Geometry scavenger hunt (shapes in nature)	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 2	Angles, Segments, and Midpoints	G.CO.3, G.CO.4	McGraw Hill	Measure angles in architecture/outdoor objects	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 3	Logic and Proof	G.CO.6, G.CO.7	McGraw Hill	Chalk proofs on sidewalk	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 4	Parallel and Perpendicular Lines	G.CO.8, G.SRT.1	McGraw Hill	Parallel/perpendicular line hunt with pictures	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 5	Triangle Relationships	G.SRT.2, G.SRT.3	McGraw Hill	Triangle congruence building with sticks/leaves	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 6	Congruent Triangles	G.SRT.4, G.SRT.5	McGraw Hill	Create outdoor triangle problems	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 7	Transformations	G.SRT.6, G.SRT.7	McGraw Hill	Use sun angles to estimate height of objects	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 8	Coordinate Geometry	G.GPE.1, G.GPE.3	McGraw Hill	Map geometry using campus coordinates	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 9	Triangle Similarity	G.SRT.5, G.SRT.8	McGraw Hill	Trig application with ropes and inclines	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question

Week	Unit Topic	Standards (LEARNS/AR DOE)	Curriculum Resources	Outdoor Enrichment Activity	ATLAS Prep Focus	Assessment
Week 1	Nature of Science & Scientific Method	HS-LS1-1, HS-LS1-2	Twig Science	Campus biodiversity survey	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 2	Cell Structure and Function	HS-LS1-2, HS-LS1-6	Twig Science	Microscopy of pond water samples	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 3	Photosynthesis and Cellular Respiration	HS-LS1-5, HS-LS1-7	Twig Science	Measure sunlight & plant growth (photosynthesis)	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 4	Macromolecules and Enzymes	HS-LS1-6	Twig Science	Testing for macromolecules in found leaves	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 5	Cell Transport and Homeostasis	HS-LS1-3	Twig Science	Osmosis/diffusion demo with natural materials	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 6	Intro to Genetics	HS-LS3-1	Twig Science	Simulated DNA extraction from fruit	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 7	Mitosis and the Cell Cycle	HS-LS1-4	Twig Science	Outdoor cell cycle timeline activity	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 8	Meiosis and Sexual Reproduction	HS-LS3-2	Twig Science	Mendelian trait collection in nature	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 9	Inheritance Patterns	HS-LS3-3	Twig Science	Create a heredity tree using observed wildlife traits	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question

Week	Unit Topic	Standards (LEARNS/AR DOE)	Curriculum Resources	Outdoor Enrichment Activity	ATLAS Prep Focus	Assessment
Week 1	Narrative Craft: Show vs. Tell	8.RL.1, 8.RL.2	Savvas Pre-AP	Descriptive nature journaling	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 2	Point of View and Character	8.RL.3, 8.RL.6	Savvas Pre-AP	Perspective writing from an insect's view	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 3	Theme through Setting	8.RL.2, 8.RL.5	Savvas Pre-AP	Symbolism walk: collect objects to represent abstract themes	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 4	Close Reading: Fiction	8.RL.4, 8.RL.6	Savvas Pre-AP	Close read a poem outside	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 5	Intro to Literary Argument	8.RI.1, 8.RI.2	Savvas Pre-AP	Write persuasive letter about local environmental issue	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 6	Analyzing Tone and Mood	8.RI.4, 8.RI.6	Savvas Pre-AP	Analyze signs or plaques for rhetorical strategies	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 7	Short Story Structure	8.RL.5, 8.RL.10	Savvas Pre-AP	Outdoor dramatic reading and discussion	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 8	Syntax and Style	8.L.1, 8.L.3	Savvas Pre-AP	Syntax exercise using found words from nature	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question
Week 9	Narrative Revision Workshop	8.W.3, 8.W.5	Savvas Pre-AP	Narrative rewrite from outdoor observations	Formative ATLAS-style questions, vocabulary, and data analysis	Exit Ticket + ATLAS-style Question

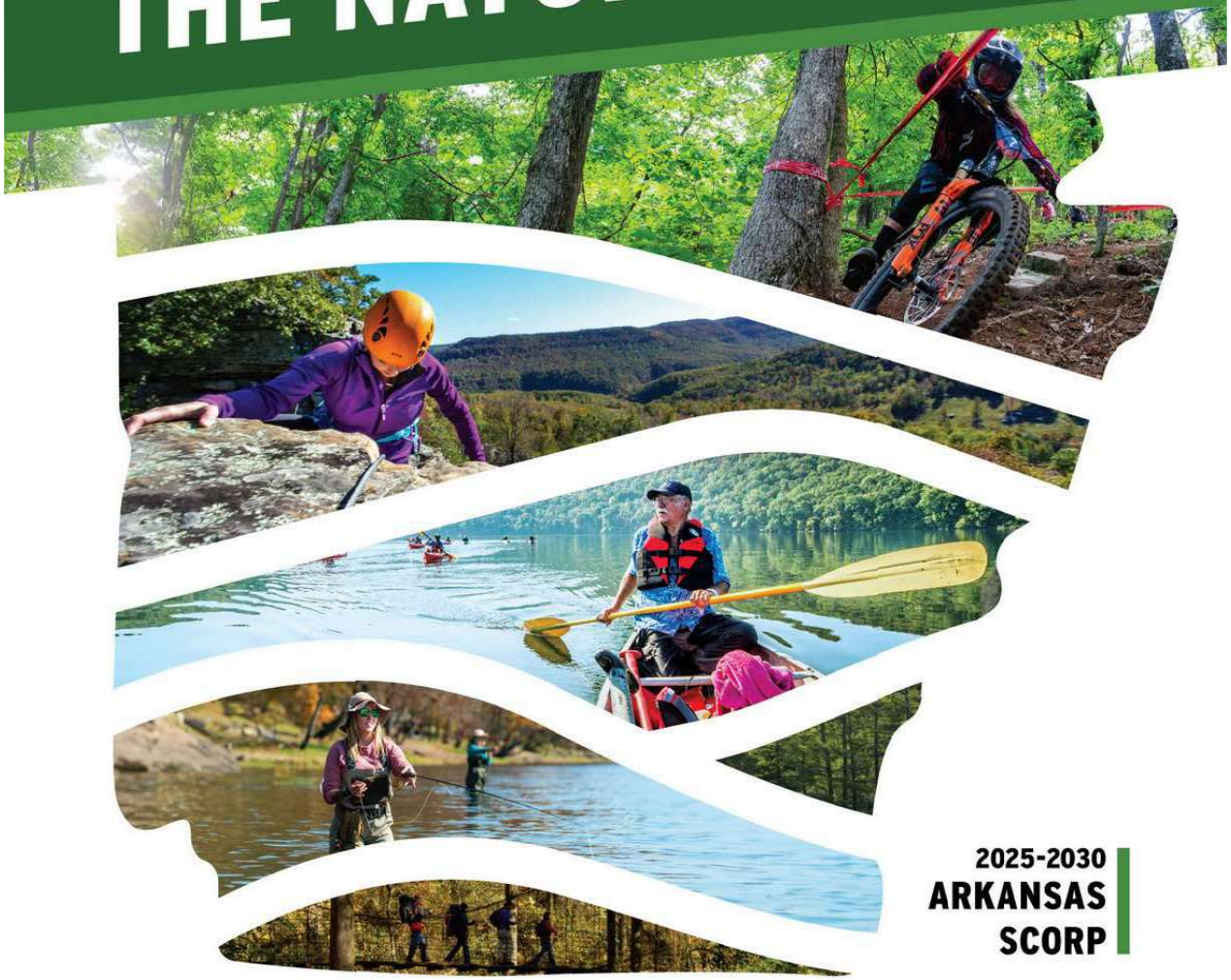
Grade	Subject	Curriculum	Lesson Focus (Week 9)	Activities	Standards Alignment
6th	ELA	Savvas	Compare two nonfiction texts about regional wildlife habitats and write a summary.	Read two articles on habitats; highlight evidence; write a text-based summary.	6.RC.16.RI
7th	ELA	Savvas	Debate land use and conservation using evidence from informational texts.	Use text sets on land development; hold structured classroom debate.	7.W.1.S
8th	ELA	Savvas	Write an argumentative essay on a climate issue using data and sources.	Use graphic organizers to build argument; write and peer edit essays.	8.W.16.R
9th	ELA	Savvas	Evaluate persuasive environmental texts and write a rebuttal letter.	Analyze persuasive appeals in sample texts; write rebuttal in letter format.	9.RC.13.RI
6th	Math	McGraw-Hill	Interpret line plots and find mean/median of wildlife observation data.	Plot animal sightings over a week; calculate mean/median; interpret results.	6.SP.4
7th	Math	McGraw-Hill	Use proportions to model trail maintenance needs across terrain types.	Calculate needed materials for trails using ratio/proportion formulas.	7.PR.1
8th	Math	McGraw-Hill	Use equations to predict environmental changes based on historical data.	Model tree growth and carbon capture using equations and data tables.	8.SP.6
9th	Math	McGraw-Hill	Apply function rules to model population changes in a local species.	Create population models with input/output tables and real data sets.	A1.EFE.1
6th	Science	Twig	Analyze weather patterns in Arkansas and how they affect ecosystems.	Record daily weather; chart trends; connect to local flora/fauna changes.	MS-ESS2-5
7th	Science	Twig	Measure and record stream flow to study erosion and runoff.	Collect stream data; calculate flow rate; compare erosion at two points.	MS-ESS2-4
8th	Science	Twig	Conduct an outdoor wind speed and air quality lab with data comparison.	Use handheld anemometers and sensors; chart wind/air quality over time.	MS-ESS3-5
9th	Science	Twig	Explore the respiratory systemâ€™s reaction to elevation and air quality.	Measure lung capacity pre/post activity at elevation; graph changes.	HS-LS1-3

Grade	Subject	Curriculum	Lesson Focus (Week 2)	Activities	Standards Alignment
6th	ELA	Savvas	Write a survival story with a clear setting and conflict in a natural environment.	Read two wilderness survival excerpts; pre-write in nature journal; draft a story.	W.6.3, RI.6.1
7th	ELA	Savvas	Write a narrative from the perspective of a lost hiker using sensory language.	Discuss point of view; outline survival scenario; write and peer-review drafts.	W.7.3, SL.7.4
8th	ELA	Savvas	Compose a narrative about surviving a natural disaster with factual accuracy.	Watch storm footage; write a fictional but fact-based survival story.	W.8.3, RI.8.1
9th	ELA	Savvas	Write a narrative based on a real-world crisis event with dialogue and pacing.	Read crisis journalism; create fictional piece; include structured dialogue.	W.9-10.3, RI.9-10.1
6th	Math	McGraw-Hill	Use decimals and measurement tools to track plant growth in a field plot.	Measure plant growth in cm daily; graph data in a chart; analyze average changes.	6.GM.7
7th	Math	McGraw-Hill	Measure and calculate proportions using trail map scale drawings.	Use compass and map scale to calculate actual distances from trail map.	7.GM.6
8th	Math	McGraw-Hill	Graph temperature changes over 3 days using linear equations.	Collect local hourly temp data; create tables and graph line of best fit.	8.FN.6
9th	Math	McGraw-Hill	Use linear functions to estimate supply needs for a first aid station.	Use first aid kit inventory and function equations to project resupply timing.	A1.LFE.1
6th	Science	Twig	Model the water cycle using observation and diagrams from outdoor sources.	Use cups and water to show condensation, precipitation, and evaporation cycles.	MS-ESS2-4
7th	Science	Twig	Simulate runoff and erosion using a mini watershed outdoor experiment.	Create runoff models using soil, trays, and water; observe and log results.	MS-ESS2-1
8th	Science	Twig	Conduct an experiment modeling air pressure and its effects on weather systems.	Outdoor barometer construction; track daily pressure readings and discuss patterns.	MS-ESS2-5
9th	Science	Twig	Analyze human body systems' response to environmental stressors (e.g., heat).	Outdoor heart rate test before/after physical exertion; connect to body systems.	HS-LS1-2

Grade	Subject	Curriculum	Lesson Focus (Week 21)	Activities	Standards Alignment
6th	ELA	Savvas	Research and write an informative report on local tourism and natural attractions.	Use online and library sources to gather facts; draft, revise, and cite sources.	W.6.2, RI.6.9
7th	ELA	Savvas	Write a multi-paragraph research paper on endangered species in Arkansas.	Take notes from nonfiction texts; create a report with headings and citations.	W.7.2, RI.7.1
8th	ELA	Savvas	Compose a formal report on the effects of climate change in the region.	Compile and format report using statistics and credible sources.	W.8.2, RI.8.9
9th	ELA	Savvas	Develop a research-backed proposal for a community-based environmental project.	Research local need; draft a persuasive proposal; include solutions and partners.	W.9-10.7, RI.9-10.9
6th	Math	McGraw-Hill	Use percentages to create a simple budget for an outdoor trip or field study.	Plan costs of transportation, food, and supplies using percent calculations.	6.PR.5
7th	Math	McGraw-Hill	Analyze trail elevation data and calculate percent change over distances.	Use digital elevation maps; calculate percentage increases in slope height.	7.PR.3
8th	Math	McGraw-Hill	Use bivariate data to compare two environmental variables (e.g., rainfall & erosion).	Use spreadsheets to chart correlation between rainfall and erosion levels.	8.SP.1
9th	Math	McGraw-Hill	Apply statistics and functions to resource allocation for emergency kits.	Create a budget for first responder supplies using function models.	A1.SP.3
6th	Science	Twig	Explore human body systems and their role in outdoor physical activity.	Diagram major body systems; track personal fitness data during hikes.	MS-LS1-3
7th	Science	Twig	Study the impact of human activity on local ecosystems and biodiversity.	Visit impacted areas; compare field data to protected ecosystems.	MS-LS2-4
8th	Science	Twig	Design and conduct an experiment on human response to heat or exertion.	Conduct timed physical tasks; monitor vitals and hydration effects.	MS-LS1-8
9th	Science	Twig	Examine public health issues related to environmental hazards.	Research pollution, mold, and disaster aftermath effects on public health.	HS-ESS3-1

ARKANSAS
OFFICE OF
OUTDOOR RECREATION

CONNECTING THE NATURAL STATE



2025-2030
ARKANSAS
SCORP

STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

This SCORP meets the requirements for continued eligibility to receive matching Land and Water Conservation Funds. This plan was funded in part through a grant from the National Park Service under LWCF Act of 1965 (PL 88-575).

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STATE OF ARKANSAS
SARAH HUCKABEE SANDERS
GOVERNOR

Lauren S. Imgrund
Associate Director, Partnerships and Civic Engagement
Department of the Interior
1849 C St. NW, Washington, DC 20240

Mrs. Imgrund,

Arkansas is called the Natural State for a reason. From the mountains to the timberlands, to the Delta, and everywhere in between, natural beauty surrounds us. My administration has set a course to expand access to this beauty like never before.

Part of this expansion requires strategic planning, which Arkansas accomplishes every five years through the Statewide Comprehensive Outdoor Recreation Plan (SCORP). This plan provides us with an opportunity to review what we have already accomplished and look to the future for new initiatives to stimulate our state's outdoor economy. Further, the plan provides a chance to identify specific challenges that we face in the outdoor recreation space and create an action plan to overcome those issues.

The SCORP combines the work of outdoor recreation stakeholders from around Arkansas, multiple state agencies, and Arkansans, who utilize our state's natural resources on a daily basis.

Arkansas' outdoor spaces are one of our state's greatest natural resources. They offer great opportunity but must be properly stewarded to achieve their full potential. That's the aim of this report, and we look forward to continuing to make Arkansas the best state in America to live, work, and raise a family.

Sincerely,

Sarah Huckabee Sanders
Governor of Arkansas

Sincerely,

Bryan Sanders
First Gentleman of Arkansas

State Capitol Building • Little Rock, AR 72201
Telephone: (501) 682-2345
www.governor.arkansas.gov

Sarah Huckabee Sanders
Governor
Shea Lewis
Secretary

Dear Colleagues and Stakeholders,

Every five years, the Arkansas Department of Parks, Heritage and Tourism takes a pulse on the current state of outdoor recreation and Arkansas' opportunities in the years ahead as it pertains to recreation development and grants. The 2025-2030 Arkansas Statewide Comprehensive Outdoor Recreation Plan (SCORP) celebrates the enduring bond between the people of Arkansas and our state's extraordinary natural landscapes, a connection that has defined our history and continues to shape our future.

From the days when Arkansas was known simply as "Arkansaw" to its current recognition as "The Natural State," our unspoiled wilderness has been a beacon, drawing explorers, settlers, and indigenous peoples alike. These lands, rich with natural beauty and resources, have provided sustenance, adventure, and solace to all who have called them home.

In these modern times we live in, the outdoors brings more importance than ever. Since the last SCORP, technology has leaped forward but has left many without the experience of adventure in our state. We see the work of our department as more important than ever—to welcome all into the Natural State and create a lasting impact for future generations. The outdoors continues to bring us together, offering shared experiences of adventure, relaxation, and rejuvenation. Whether through family camping trips, a float down our scenic rivers, or chance encounters on our trails, the outdoors dissolves barriers and fosters connections across generations and cultures.

The SCORP is a testament to this enduring connection. It not only celebrates our state's natural treasures but also seeks to preserve and enhance them for future generations. By promoting access to recreational opportunities and fostering a deeper appreciation for the outdoors, the SCORP aims to strengthen the ties that bind us to our land and one another.

This report calls upon us to carry forward the spirit of stewardship and reverence for the outdoors that has defined Arkansas for centuries. It encourages us to invest in conserving land for preservation and recreation and offer access to green spaces for all communities.

In doing so, we honor the legacy of those who came before us and pave the way for a future where the natural beauty of Arkansas continues to inspire, connect, and uplift all who call it home. The SCORP offers valuable insights and inspiration for professionals in the recreation industry and local communities alike, inviting everyone to experience the beauty and bounty of The Natural State.

Together, let us embrace the spirit of adventure and discover the wonders waiting to be explored in Arkansas.

Sincerely,

Shea Lewis

Secretary

Arkansas Department of Parks, Heritage and Tourism
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Sarah Huckabee Sanders
Governor

Shea Lewis
Secretary

Arkansas Department of Parks, Heritage and Tourism

Office of Outdoor Recreation

Little Rock, Arkansas

Fellow Arkansans:

Allow me to present the 2025-2030 Arkansas Statewide Comprehensive Outdoor Recreation Plan, or "SCORP." The plan is a required component of Land and Water Conservation Fund eligibility, and so this document represents, at base level, the continued eligibility of Arkansas to receive LWCF funding. These dollars help to fund projects that provide outdoor recreation for all the citizens of Arkansas, and also guests to our state.

The SCORP is not just a part of the federal funding system, but also a comprehensive guide to Arkansas' outdoor recreational opportunities. It covers the state's natural resources and facilities that make it one of the best places to enjoy the outdoors in the country. The SCORP aims to capture the beauty of Arkansas in its entirety, from the highlands of the Ozarks to the lowlands of the Arkansas Delta, and everything in between. This includes the wonderful outdoor opportunities available in our largest cities as well as those found deep in the woods or on our many lakes and streams. It is the essence of why our moniker is The Natural State.

The most important thing to remember is that the SCORP plan is just that – a plan. It takes into account the recreational opportunities available in the state and the opinions, suggestions, and wishes of the citizens who use those opportunities. By doing so, the SCORP writing staff was able to identify a set of priorities that will help in the development of new and innovative facilities for public outdoor recreation, while also preserving Arkansas' natural resources. These priorities come directly from the public and outdoor recreation professionals who serve them. Our staff hopes that these priorities can serve as a helpful guide for these dedicated professionals as they continue to increase access to Arkansas' wealth of public outdoor recreation opportunities.

The plan I am presenting is the result of a collaborative effort from multiple state agencies, hundreds of professional recreation providers, and thousands of everyday citizens. This project is a testament to teamwork and public trust, and it reflects well on all Arkansans. I am excited to share this plan with the people of Arkansas.

Sincerely,

K Andrews

Katherine Andrews
Director, Office of Outdoor Recreation

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How to Use This SCORP

This SCORP serves as a quick reference for ideas, inspiration, and guidance for those developing outdoor recreation in Arkansas. The SCORP's goal is to help outdoor recreation providers recognize and remove barriers so that everyone can enjoy outdoor recreation.

When planning your next project, consider using the SCORP to help influence your decision-making process.

1 Gain Context

Read through the "Introduction" and "Research" chapters to better understand the SCORP's purpose, theme, and research methods.

2 Understand Barriers

Barriers are obstacles that keep people from participating in outdoor recreation. Learn how to recognize, remove, and prevent barriers.

3 Discover Arkansas' Needs

SCORP Priorities are large ideas meant to encourage future outdoor recreation projects. Think of them as the recreation categories that will positively impact Arkansas the most.

4 Plan Your Project

Take another look at your community. Now that you have the tools you need, it's time to plan a project that meets the needs of your city, your region, and the state.

Preface

Arkansas’ Outdoor Legacy

Arkansas' natural beauty has always been its defining feature, attracting people from all walks of life to its untamed landscapes long before urbanization and development took hold. From the days when it bore the simpler moniker of "Arkansaw" to its present designation as "The Natural State," the allure of Arkansas has been its unspoiled wilderness, beckoning explorers, settlers, and indigenous peoples alike with promises of adventure, sustenance, and solace.

Indigenous people forged deep connections with the land and landscapes of Arkansas. Their legacy endures in the rocky soil beneath towering bluffs and along the clear rivers, where traces of their existence remain etched into the landscape.

Centuries later, as waves of settlers and pioneers ventured into this territory, they too found themselves captivated by the wilderness that surrounded them. For them, Arkansas represented not just a destination, but a way of life—a rugged existence shaped by the land's abundance and challenges alike. Whether they settled at the head of a creek, atop a bald hill, or along the banks of the mighty Mississippi, these early Arkansans forged communities bound together by a shared reliance on the land and its resources.

But it wasn't just survival that drew people together in Arkansas' great outdoors – it was also the promise of connection and camaraderie. Along the rivers and trails that crisscrossed the state, travelers encountered one another, sharing stories, resources, and companionship. From chance encounters with fellow wanderers to planned gatherings at trading posts and settlements, these interactions served as the lifeblood of early Arkansas society.

Even today, as modern amenities shape our lives in new ways, the outdoors continues to serve as a powerful connector, bringing people together in shared experience of adventure, relaxation, and rejuvenation.

Arkansas' Statewide Comprehensive Outdoor Recreation Plan (SCORP) stands as a testament to this enduring bond between people and nature. It not only celebrates the state's natural treasures but also seeks to preserve and enhance them for future generations. The SCORP aims to strengthen the ties that bind Arkansans to their land and to one another.

As we reflect on Arkansas' rich history and the enduring connections forged in its great outdoors, it becomes clear that this legacy is not merely a relic of the past. The importance of preserving our natural heritage and nurturing our connections to the land has never been more critical.

Looking ahead, it is incumbent upon us to carry forward the spirit of stewardship and reverence for the outdoors that has defined Arkansas for centuries.

In doing so, we honor the legacy of those who came before us and we pave the way for a future where the natural beauty of Arkansas continues to inspire, connect, and uplift all who call it home.
Whether you're a professional in the recreation industry or a local community working towards improved quality of life, the SCORP offers valuable insights and inspiration. It's a testament to the shared love for the outdoors among Arkansans and visitors alike, inviting everyone to experience the beauty and bounty firsthand. So let's dive in, embrace the spirit of adventure, and discover the wonders waiting to be explored in The Natural State.

Signed,

The 2025-2030 SCORP Team

Introduction

Background & Purpose

The SCORP aims to provide an overview of Arkansas' current public outdoor recreation resources. It offers recommendations, guidance, and inspiration for the state's outdoor recreation providers as they work to conserve, maintain, and expand the recreational opportunities available to both residents and visitors.

Beyond its role in everyday planning and development of public outdoor facilities, the SCORP is crucial for grant applications, which often require references to it. Specifically, any application for the Land and Water Conservation Fund (LWCF) State Assistance Program must detail how the project aligns with the latest SCORP priorities.

The Arkansas Office of Outdoor Recreation is the agency with the authority to represent the state with the LWCF program.

The Land and Water Conservation Act of 1964, which established the Fund, also mandates that each state produce and periodically update a tailored SCORP. Other state agencies, like the Arkansas Natural and Cultural Resources Council (ANCRC), have similarly integrated SCORP references into their grant requirements.

The LWCF is funded through the extraction of oil and gas from America's Outer Continental Shelf. It provides financial support for conserving and managing public lands and waters in the U.S. LWCF helps fund the acquisition of land for parks and recreation areas, supports conservation easements, and enhances outdoor recreational facilities and access, all aimed at preserving natural resources and providing outdoor opportunities for the public.

These areas can serve conservation purposes, such as Lucy's Bend Natural Area in Saline County, a site managed with the primary goal of protecting significant ecological habitats, or provide urban recreational opportunities, like Valencia Park Inclusive Playground in Maumelle, a state-of-the-art recreational facility designed to be accessible and enjoyable for children of all abilities. Despite their differences, both projects share two key features: they are partially funded by the LWCF and significantly enhance the ability of all Arkansans to enjoy the state's natural beauty.

The latest version of Arkansas' Statewide Comprehensive Outdoor Recreation Plan reflects both past traditions and new ideas. Although some concepts may appear divergent, the plan is unified by a long-standing love and respect for the outdoors in Arkansas and all of the benefits that time outside offers.

Theme: Connecting the Natural State

Connecting outdoor recreation parks and amenities through a comprehensive network of pathways, green spaces, and multi-modal transportation options fosters a dynamic ecosystem where people and nature coexist harmoniously. It enhances accessibility, promotes community engagement, and fosters environmental responsibility, making outdoor recreation more enjoyable and beneficial for everyone.

It's important to note that trail development requires planning and consideration of environmental impact, community needs, and land management. However, when done thoughtfully, connecting parks and amenities through trails can be a powerful tool for enhancing the value and impact of outdoor recreation in our communities.

Benefits to prioritizing trail connectivity:

Enhanced access and exploration:

- Expanded opportunities: Trails create a network that allow people to explore a wider range of landscapes and amenities within a single trip. Instead of being confined to one park, they can hike, paddle, bike, or run between different areas, experiencing diverse scenery and activities.
- Accessibility for different abilities: Trails can be designed to cater to different levels of physical ability, allowing people of all ages and fitness levels to enjoy the outdoors. Connecting accessible trails between parks provides greater inclusivity and encourages shared experiences.
- Increased movement: Trails offer a healthy way of life. As individuals traverse landscapes, they not only strengthen their bodies but also rejuvenate their minds, fostering a deeper connection with the natural world and igniting a passion for adventure and exploration.

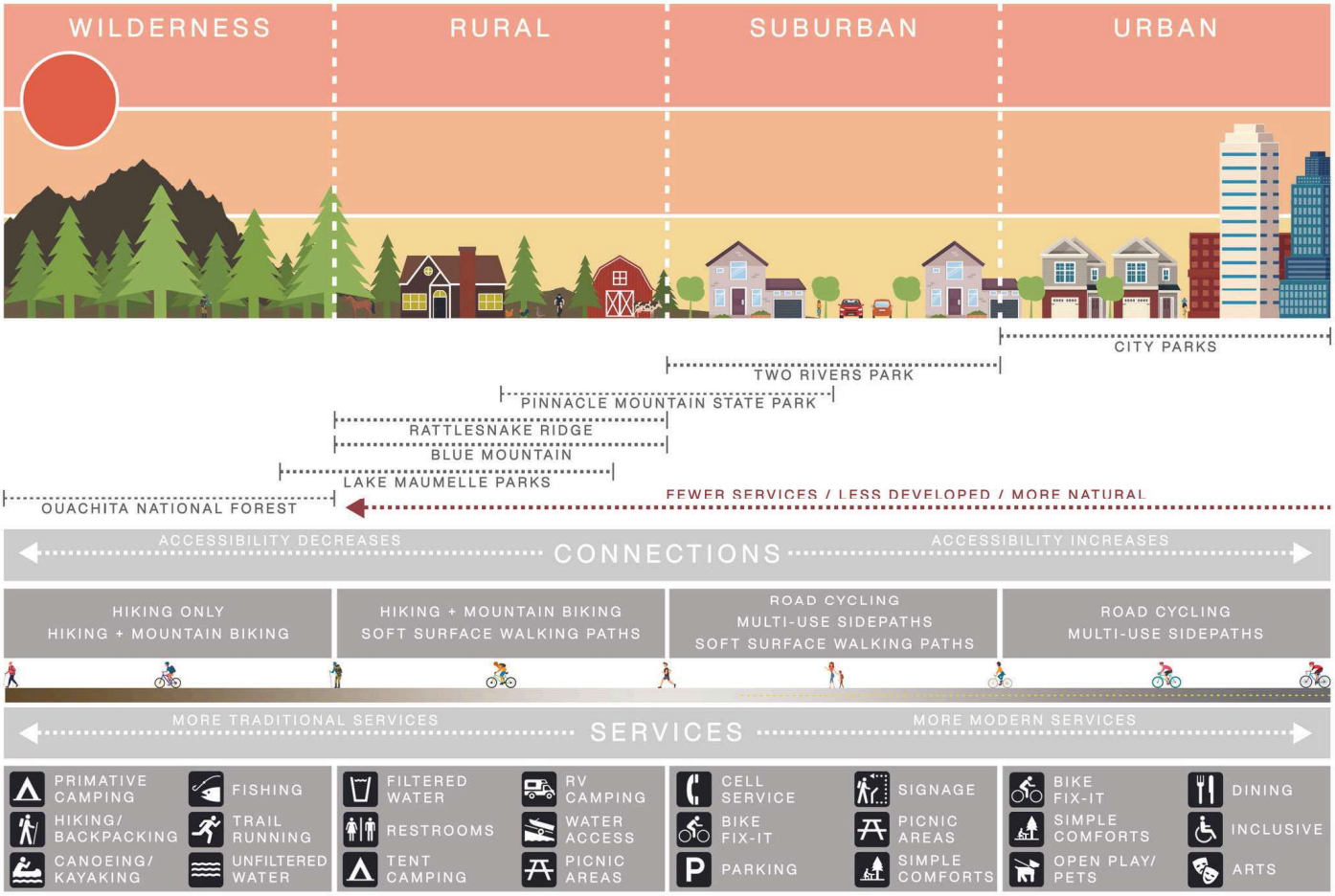
Conservation:

- Habitat connectivity: Trails can be planned to protect and connect wildlife corridors, allowing animals to move freely between different habitats. This is crucial for maintaining biodiversity and healthy ecosystems.
- Sustainable land management: Trail networks can encourage responsible use of natural resources and promote awareness of conservation efforts. Connecting parks also helps protect green spaces and prevent sprawl development.
- Improved water quality and air quality: Trails can reduce runoff and erosion, enhance natural filtration, and encourage eco-friendly transportation.

Community building and social interaction:

- Shared spaces and experiences: Trails create corridors for people to meet and interact, fostering a sense of community and encouraging social connections. Shared use trails can bring together hikers, bikers, families, and nature enthusiasts, promoting understanding and appreciation for different activities.
- Community events and activities: Connected trails can facilitate organized events like races, group hikes, or educational walks, further encouraging community engagement and participation in outdoor recreation.
- Economic benefits: A network of trails can attract visitors from outside the area, boosting local businesses like restaurants, shops, and accommodation providers. This can revitalize communities and provide economic opportunities.

Connecting outdoor recreation parks and amenities creates a more cohesive and vibrant network for people and nature to thrive. It enhances accessibility, promotes community engagement, and fosters environmental responsibility, making outdoor recreation more enjoyable and beneficial for everyone.



Graphic provided by Crafton Tull.

A case study for connectivity

Many are familiar with popular spots like Pinnacle Mountain State Park and Two Rivers Bridge. You might not be as familiar with the Maumelle Pinnacles Conservation Area (MPCA). This area offers over 19 unique destinations, including Lake Maumelle, which supplies 90% of Little Rock's fresh water.

Numerous hiking and mountain biking trails with varying levels of difficulty can be found at Pinnacle Mountain State Park, Rattlesnake Ridge, Bufflehead Bay, Blue Mountain and beyond. But even more options for play, recreation, and relaxation are available:

- Trail Running
- Backpacking
- Mountain Biking
- Road Cycling
- Camping
- Rock Climbing
- Bank & Boat Fishing
- Boating, Kayaking, Canoeing & Paddleboarding
- Birdwatching
- Horseback Riding
- Hunting

These recreational opportunities range from urbanized city parks to secluded natural spaces. The plan aims to link these areas via diverse pathways, including mountain bike trails, paved pedestrian paths, soft surface trails, and the Ouachita Trail spanning 223 miles. The system will connect Pinnacle Mountain State Park to Queen Wilhelmina State Park and beyond. This connectivity will also create an extension to downtown Little Rock and the largest population center in Arkansas.

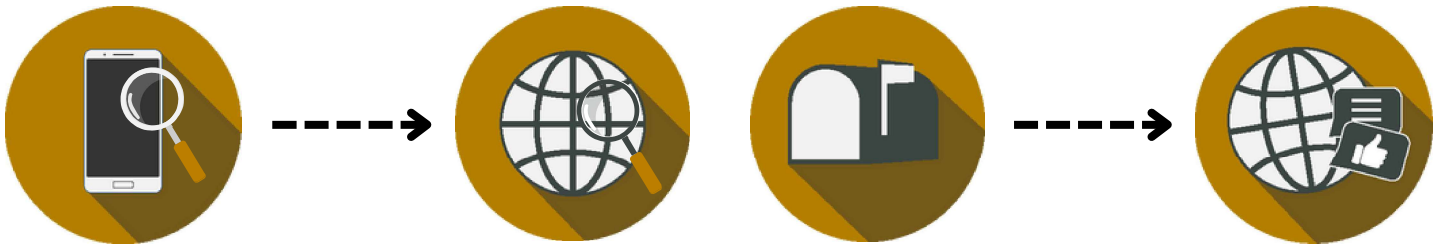
This connectivity project is a collaboration between multiple state agencies, nonprofits, city and county governments, and private organizations; a great lesson in teamwork.

Destinations in the MPCA are categorized into four "transects": wilderness, rural, suburban, and urban, each offering distinct experiences. Explore the graphic above for more details.

Research

Lessons Learned in Methodology

In the previous SCORP, the State of Arkansas transitioned from telephone to internet-based research methods. This alteration resulted in heightened response rates, facilitated the pinpointing of region-specific feedback, and ultimately furnished our team with data that surpasses the accuracy, detail, and comprehensiveness of previous SCORP surveys conducted via telephone in Arkansas. The same survey questions for this SCORP were used in the previous SCORP. However, in future SCORPs, staff will make the survey shorter. We learned that promoting the survey online and through social media drastically increased our survey responses compared to the previous SCORP when the survey was sent through the mail.



Town Hall Meeting Findings

In April 2022, Arkansas Tech University partnered with the SCORP staff to organize 9 regional outdoor recreation leadership forums. These forums, held at 7 state parks, a conference venue, and online, aimed to inform the SCORP and illicit recommendations. Each forum featured discussions on current and future outdoor recreation trends in Arkansas, with attendance ranging from 5 to 14 participants.

When summarizing thoughts and discussion points related to current issues and trends for outdoor recreation Arkansas, the topics most notable include:

- Public access to outdoor recreation areas
- Demographic changes to residents and outdoor recreation participants
- Lower rates of outdoor recreation participation and engagement
- Lack of trained workforce
- Need to improve information distribution related to grants and outdoor recreation opportunities
- Safety when participating in outdoor recreation opportunities

It is prudent to monitor these issues when identifying trends in the future.

When summarizing thoughts and discussion points related to future issues and trends for outdoor recreation in Arkansas, the topics most notable include:

- Aging infrastructure and maintenance
- Participation and engagement (specifically with youth)
- Continued demographic shifts in resident population
- Workforce recruitment and education/training
- Fiscal responsibility and resource procurement
- Community leadership education/training
- Lack of information distribution and optimizing distribution opportunities
- Procuring additional areas and opportunities for public access
- Wifi and cellular availability for information and safety
- Resident/participant education and training for conservation and sustainable use of resources
- Connectivity of people to places and between recreation opportunities
- Collaboration related to communities, agencies, and nonprofits

Arkansas Resident Survey Results

Arkansas residents reported participating in a wide range of outdoor recreation activities across all regions and counties in the state. Respondents to this survey noted areas of improvement related to their participation in outdoor recreation and respondents reported a wide array of motivations for outdoor recreation participation.

The research team designated six regions across the state of Arkansas: Central, North Central, Upper Delta, Lower Delta, Southwest, and Northwest. Notably, the Northwest region had the highest activity concentrations, including hiking, backpacking, cycling, and camping. The Southwest region also saw significant activity, while the Delta regions had lower overall use. Activities varied by region, with hiking concentrated in multiple areas, and certain activities like off-highway-vehicle use prevalent in specific regions. State-owned lands were the most utilized, followed by private and federal lands. Certain activities, like hunting, primarily occurred on private lands, while nature activities led by public programs were predominantly in state-run areas.

The survey revealed trends such as extended travel for activities like sightseeing, nature exploration, and softball, while also highlighting higher engagement in outdoor art among residents living close to recreation sites and opportunity for participation growth in archery and target shooting.

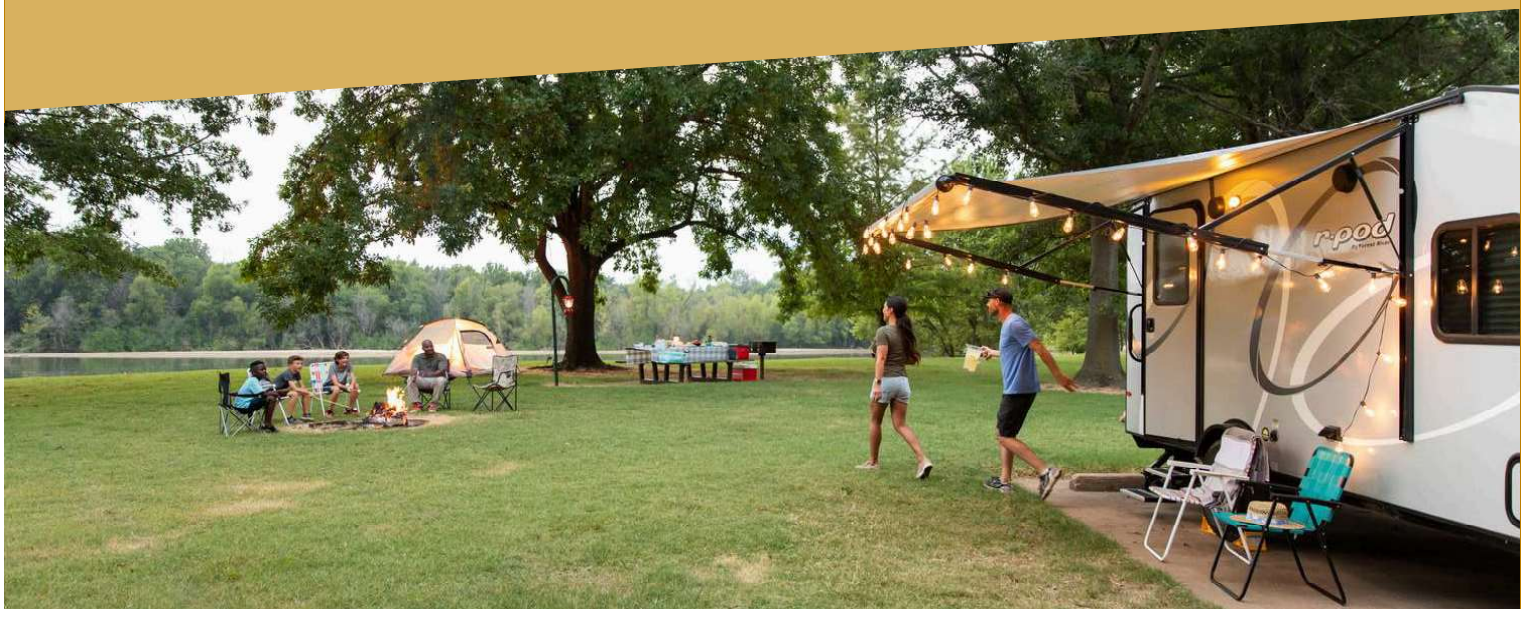
Arkansas Recreation Provider Survey Results

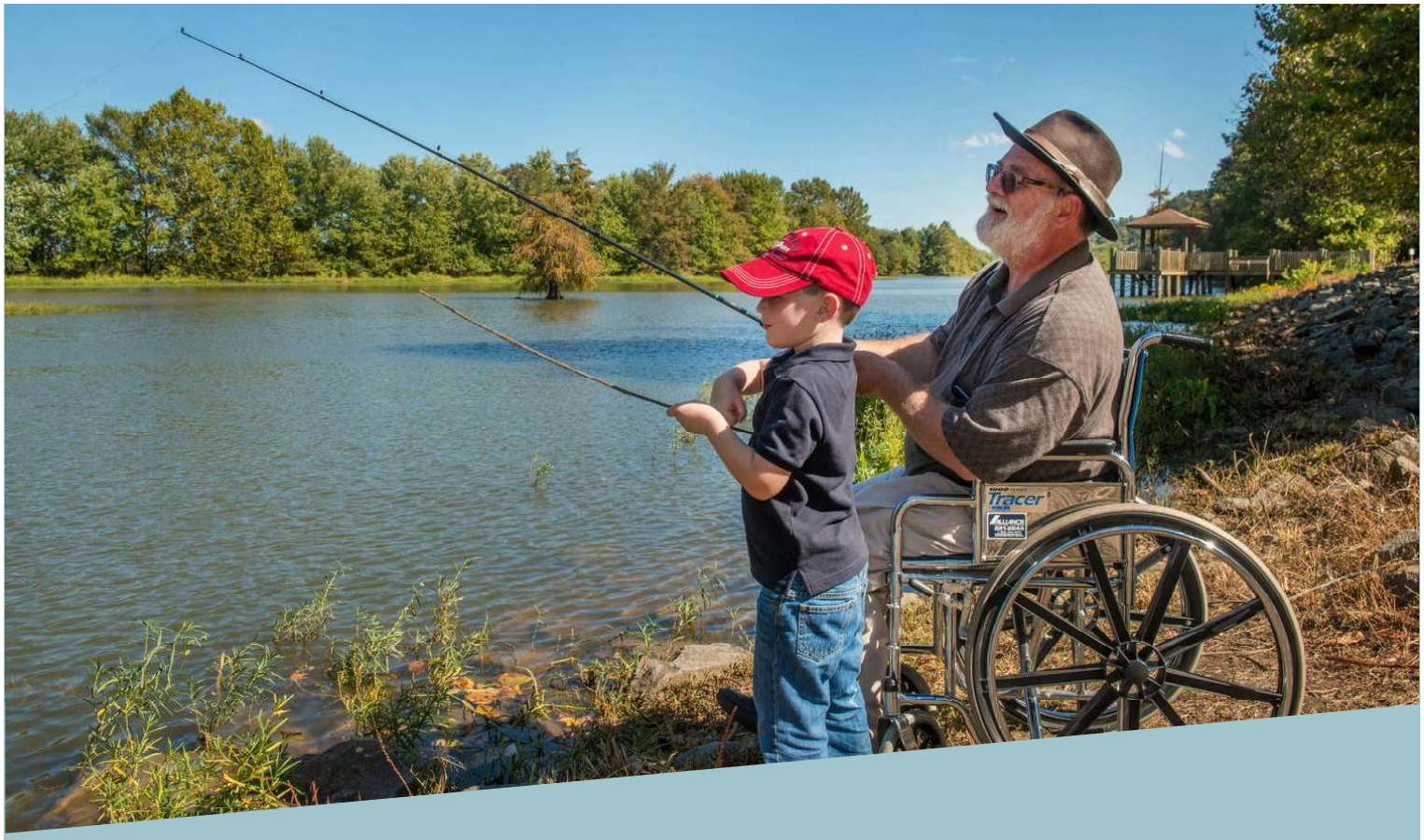
Arkansas recreation providers (agencies) reported offering in a wide range of available outdoor recreation areas, facilities, and activities across all regions and counties in the state. Responding agencies reported a wide range of needs and varying priorities related to maintenance and upkeep of areas, facilities, and programs. Visitations estimates were wide ranging as were social media use to distribute information. Most agencies reported seeking out grants to facilitate projects in their agency.

Among camping options, camping while backpacking and camping in an undeveloped campground were the most popular options just ahead of camping in a developed camping area. In terms of fishing, fishing from a bank, dock, pier, or jetty was by far the most popular option. Off-roading activities were largely equal across all types and were also overall low in comparison to other activities in the table. For water play, swimming or wading in freshwater (lakes, rivers, creeks) was the top activity followed by visiting lakes/rivers/streams/bayous. Popular team activities included softball, swimming, kickball, and volleyball.

Respondents expressed interest in additional park activities, with pickleball, ATV use, and disc golf among the most requested, while new popular activities prompting park adaptation included: pickleball, biking, disc golf, shooting sports, soccer, paddling, and dog parks, with concerns raised about funding and land availability, and mentions of decreased popularity in activities such as handball, football, tennis, and outdoor education programming.

The survey illustrates the presence of methods to track park visitation, with approximately half of parks employing some form of visitation estimation. The most common approaches to estimation include traffic and car counting systems, trail counters, head counting, and reservation systems, often used in combination. Additionally a significant portion reported over a million visits with local residents as the majority, followed by visitors from adjoining counties, throughout Arkansas, and out of state.





Barriers

Background & Purpose

Upon meticulously gathering, sorting, and examining thousands of data points, SCORP staff uncovered that the survey results consistently revealed several persistent obstacles Arkansans encounter when trying to partake in public outdoor recreation. Despite the wealth of opportunities in The Natural State, many residents still struggle to enjoy them.

The causes of these obstacles are diverse; some are immediately apparent, while others require recreation providers to adopt different perspectives. Overcoming these challenges, whether they are physical, socioeconomic, or psychological, necessitates a deeper understanding of the issues at hand.

Breaking down these barriers can enhance connections among individuals and communities.

When issues like financial limitations, physical impairments, time constraints, or discomfort are addressed, a broader segment of the population can engage in outdoor activities. This increased accessibility helps build bridges among different groups. Outdoor experiences offer a unique platform for people to bond, form new relationships, and strengthen community connections. Activities such as group hikes, team sports, or community gatherings in parks can serve as a foundation for social interaction and connection.

The following page details the barriers identified in the 2022 SCORP survey.

Barrier 1: Income Inequality

Income inequality significantly impacts participation in outdoor activities. It creates barriers for those who lack the financial means to purchase necessary equipment or afford transportation. Our survey indicates that low-income individuals face multiple barriers to outdoor recreation, including physical impairment, lack of access for the disabled, and safety concerns. These findings highlight income inequality as a major obstacle to enjoying the outdoors, as financial constraints often underlie other barriers to participation.

Barrier 2: Physical Impairment

Living with a physical impairment is a significant barrier to outdoor recreation, affecting 16.5% of respondents across all demographics. Recreation providers should consider this when designing parks and projects. Merely providing accessible parking and access does not eliminate barriers; integration into recreational spaces is essential for full access.

Barrier 3: Lack of Free Time

Many respondents cited a lack of free time as a barrier to outdoor recreation. While recreation providers cannot address this individually, they can consider it in project planning. Facilities near urban areas or downtown spaces reduce travel time. Additionally, offering activities requiring minimal planning or time commitment for recreationists can enhance accessibility.

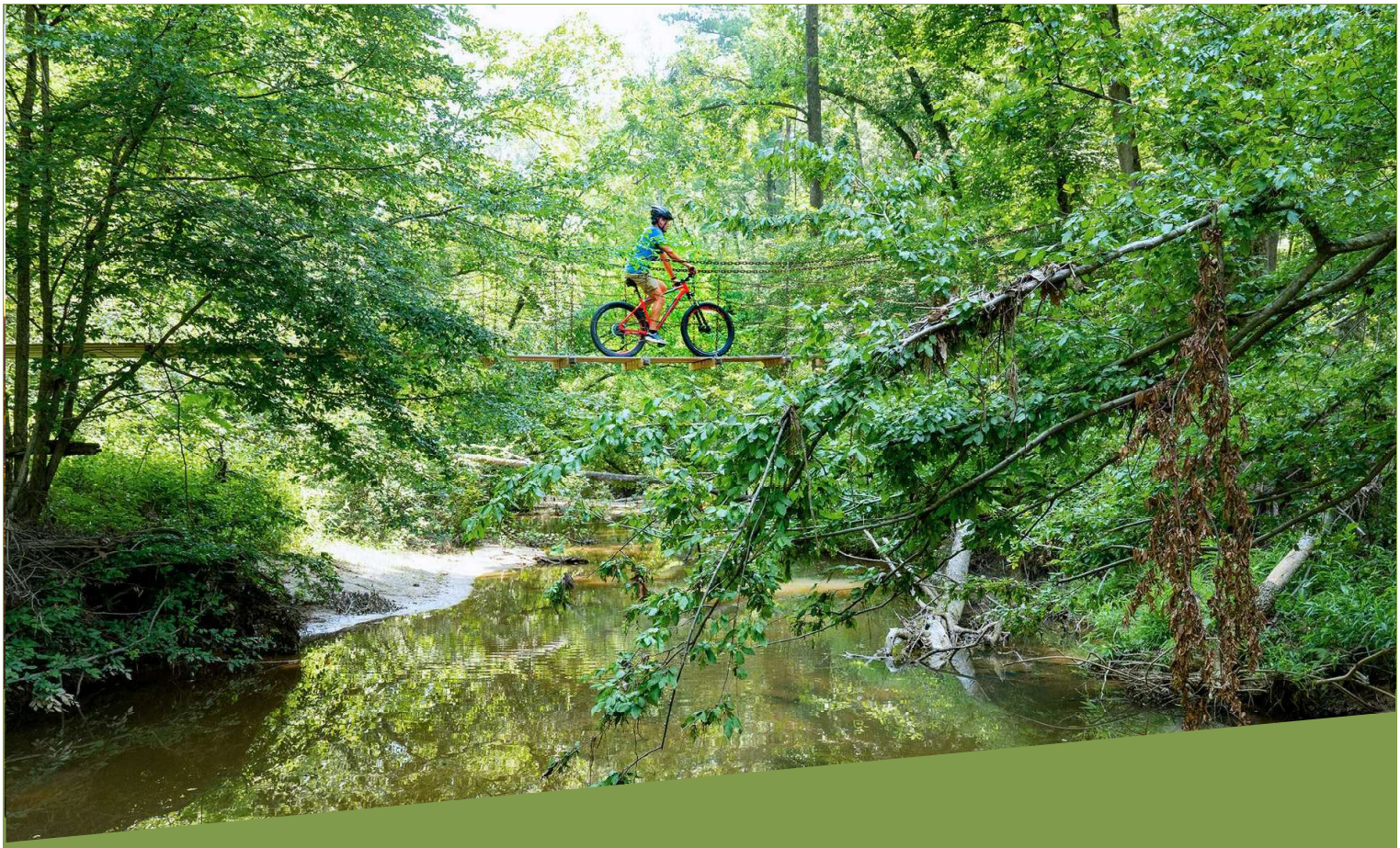
Barrier 4: Nobody To Go With

While some people enjoy solitude outdoors, many respondents noted a lack of companionship as a barrier to outdoor recreation. While it's unrealistic for providers to address this individually, Arkansas' recreation professionals should consider the isolating aspects of modern life when designing projects, especially in densely-populated areas that encourage casual public interactions.

Barrier 5: Feeling Unsafe

Concerns for personal safety in outdoor recreation pursuits act as a barrier to access, entry, and enjoyment. Recognizing and addressing this barrier may be challenging for providers. Educational opportunities to help bridge gaps and shed light on perceptions and misconceptions should be considered. Providers must understand the realities that influence access to and the use of outdoor spaces for different individuals and groups.

Whether it's through improving infrastructure, reducing financial or geographical obstacles, or ensuring accessibility for all abilities, more inclusive access to nature can enhance health and quality of life. By making outdoor spaces more accessible and connected, we not only improve individual well-being, but also promote a collective responsibility for preserving these spaces for future generations.



Priorities

Addressing Arkansas' Needs

As you delve into the SCORP Priorities outlined in the pages ahead, you'll discover a wealth of strategies aimed at enriching and enhancing the landscape and visitor experience of public outdoor recreation opportunities in Arkansas. Building upon earlier discussions, it becomes evident that many of these priorities not only intersect with each other but also with the barriers highlighted in the preceding chapter.

For instance, obstacles such as a perceived lack of companionship and lack of free time often exhibit strong correlations with factors such as age and income. Individuals in their prime working years commonly identify both a shortage of free time and companionship as impediments, with these sentiments waning among older age brackets. Furthermore, there's a subtle uptick in such sentiments as income levels rise.

These correlations hold particular relevance for recreation providers, especially in bustling urban centers, where a significant population of young professionals reside and work within the city's core. It's also extremely relevant to create and build more access to the outdoors as we see loss in population of rural towns across America. Those in the workforce are choosing to move to locations with higher quality of life, and certainly, outdoor recreation access ranks among the highest contributors.

We've identified what we deem to be the five most important priorities to the future of Arkansas' outdoors. These priorities are presented as overarching concepts, capable of addressing even the most specific community challenges. As recreation providers embark on the grant-writing journey, it's crucial to integrate these priorities and explain how proposed projects align with Arkansas' public outdoor recreation objectives by implementing each referenced SCORP Priority on the following pages.

Priority 1: Sustain Community Investment

Arkansas' outdoor recreation industry is a significant economic driver for the state, generating billions of dollars in revenue and supporting tens of thousands of jobs. The state's natural beauty, diverse landscapes, and abundance of outdoor recreation opportunities make it a popular destination for tourists and residents alike. Building access to the outdoors through infrastructure investments benefits the outdoor industry and helps grow this sector of our state's economy.

According to the Bureau of Economic Analysis' most recent report, outdoor recreation in Arkansas generates more than $4.5 billion in economic activity and supports roughly 41,000 jobs. This represents 2.2% of the state's gross domestic product (GDP).

Examples of outdoor recreation opportunities benefitting local economies:

- The Razorback Greenway is a 40-mile multi-use trail connecting communities in Northwest Arkansas. The trail has been credited with boosting property values and increasing business activity in these communities along its route.
- The Buffalo National River is a popular destination for canoeing, kayaking, and fishing. The river generates over $100 million in economic activity each year and supports over 1,000 jobs.
- Hot Springs National Park is a world-renowned destination for its natural hot springs. The park generates over $200 million in economic activity each year and supports over 2,000 jobs.

The future of outdoor recreation investment in Arkansas:

- The outdoor recreation industry is expected to continue to grow in Arkansas in the coming years. The state is making investments in its outdoor recreation infrastructure and in business resources for the industry. This growth and investment is expected to create new jobs and generate additional revenue for the state.
- The state's investment in the Delta Heritage Trail, an 85-mile gravel bike rail-to-trail project, not only preserves the rich history of the Delta region but also creates opportunities for tourism and economic development. Through collaborative efforts between local communities, government agencies, and conservation organizations, the Delta Heritage Trail project exemplifies Arkansas' dedication to building a sustainable and vibrant future for all.
- In 2023, Governor Sanders created the Natural State Initiative to further establish Arkansas as a leader in the outdoor economy and a destination for outdoor enthusiasts from around the world. The advisory council published a list of recommendations including:
  - Educate Arkansans to the personal and economic benefits of a thriving outdoor economy.
  - Promote careers in outdoor recreation, tourism, and hospitality.
  - Provide greater investment in and support to those engaged in Arkansas' outdoor economy.
- The University of Arkansas has invested in the Greenhouse Outdoor Recreation Program (GORP), a business incubator focused on the development of entrepreneurs who are creating innovative products and services within the outdoor recreation industry.

Our parks, trails, and other recreational amenities serve as magnets, drawing people to live, work, and play in our communities. To accurately gauge the impact of these recreational resources on our communities, recreation leaders require robust economic data to effectively communicate with key stakeholders. In 2025, the Office of Outdoor Recreation will conclude a statewide outdoor recreation economic impact study that will provide valuable data and insights for this purpose.

The financial gains and clear positive returns from investments in outdoor recreation infrastructure underscore the importance of maintaining funding for these activities. In the face of budget constraints, it becomes crucial to substantiate the economic value of allocating funds to parks and outdoor recreation amenities. Sustaining investment requires effective communication with decision-makers and citizens alike. To advocate for the value of outdoor recreation, both socially and economically, enhanced data and outreach efforts to local officials and leaders are essential. By emphasizing the return on investment, recreation providers can demonstrate that these funds are well-spent and yield significant societal and economic benefits.

Recreation providers should leverage state and federal grant opportunities, like the Recreational Trails Program (RTP) managed by the Arkansas Department of Transportation, for infrastructure investments.

Priority 2: Improve Accessibility to Outdoor Recreation

All recreation providers strive for inclusivity, ensuring that their parks are welcoming to all users. No reputable provider would intentionally exclude any individual or user group from enjoying communal spaces. Consequently, it might appear unnecessary to designate Improve Accessibility to Outdoor Recreation as a SCORP Priority. However, based on survey responses, we believe this Priority holds significant importance.

Access extends beyond measures like sidewalks and wheelchair ramps, which serve to make previously inaccessible areas accessible. While it's true that many parks could benefit from upgrades for wheelchair access, there are demographics beyond the physically impaired that face barriers to outdoor recreation. This priority encourages providers to deeply assess their communities and honestly evaluate the services offered by their public spaces and facilities.

Improving accessibility to outdoor recreation involves implementing various measures to ensure that individuals of all abilities can fully participate and enjoy outdoor activities. Below are ways to enhance accessibility:

Infrastructure Improvements:

- Install wheelchair-accessible ramps, paths, and trails to provide easy entry and navigation for individuals with mobility impairments.
- Construct accessible parking spaces and restroom facilities near recreational areas to accommodate individuals with disabilities.
- Incorporate tactile paving, signage with braille, and audible signals to assist individuals with visual impairments in navigating outdoor spaces.

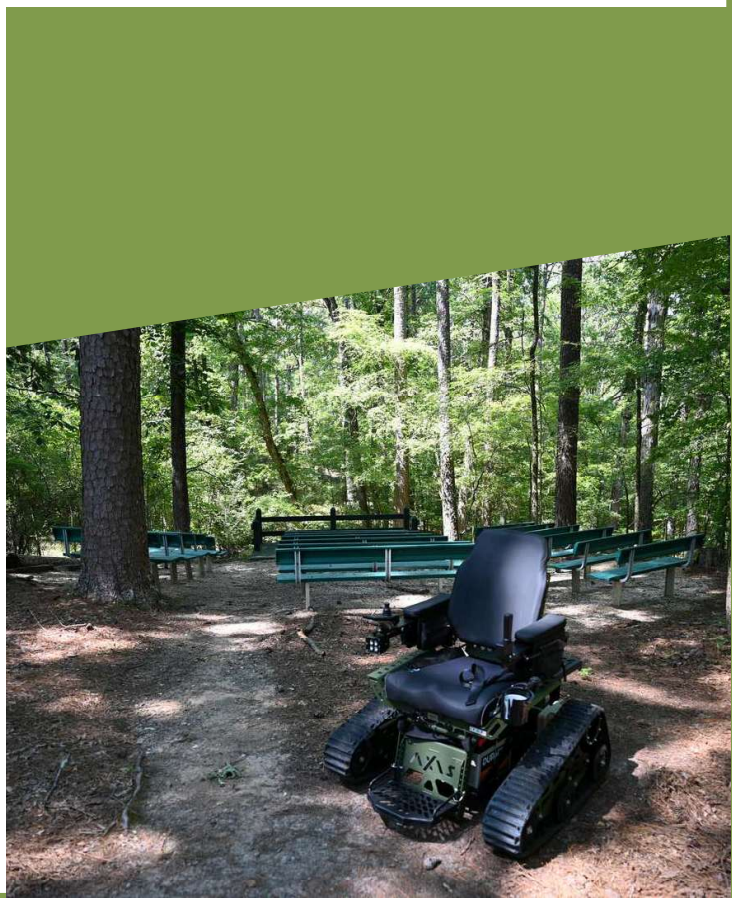
Adaptive Equipment and Facilities:

- Provide adaptive equipment such as all-terrain wheelchairs, handcycles, and adaptive kayaks to enable individuals with disabilities to engage in many types of outdoor activities.
- Establish adaptive sports programs and inclusive recreational events that cater to individuals with diverse abilities, fostering participation and community integration.

Education and Training:

- Offer training programs and resources to outdoor recreation staff and volunteers on disability awareness, inclusive practices, and proper assistance techniques.
- Provide information and guidance to visitors with disabilities on accessible trails, amenities, and activities available in outdoor recreation areas.

In 2024, the Arkansas Game & Fish Commission and the Arkansas State Parks partnered on an initiative to to make the outdoors more accessible to all Arkansans by creating a new adaptive recreation program to increase outdoor opportunities and awareness for mobility-impaired individuals. Electric wheelchairs, equipped with rubberized tracks to allow the user to overcome many types of terrain, were purchased for use, providing greater access to hunting, shooting, angling, traversing the trails and wildlife-watching opportunities for mobility-impaired individuals.



Priority 3: Foster Outdoor Innovation

In the modern age, technology has become an integral part of our daily lives, permeating every aspect, including outdoor recreation. Leveraging technology can revolutionize outdoor experiences, making them more accessible, engaging, and informative. This priority explores various technological innovations and initiatives aimed at enhancing outdoor recreation, fostering innovation, and creating memorable experiences for enthusiasts of all ages.

Incorporating Technology for Outdoor Recreation:

Mobile Applications:
Mobile apps offer a plethora of functionalities, from trail maps and GPS navigation to weather forecasts and safety alerts. Incorporating features such as user-generated reviews and real-time updates can significantly enhance the outdoor experience.

Recommendations:
Collaborate with local outdoor organizations and developers to create comprehensive, user-centric apps that facilitate connectivity among users. Incorporate features such as social sharing, community forums, and event calendars to foster a sense of belonging and camaraderie.

Interactive Map Concept:
The WY Wonder Map concept, inspired by Wyoming's outdoor recreational opportunities, utilizes interactive mapping technology to showcase various attractions, trails, and amenities.

Recommendations:
Expand the concept to encompass the state of Arkansas, fostering collaboration among state agencies, conservation groups, and technology companies. Integrate features like live updates, user-generated content, and crowd-sourced recommendations to foster dynamic engagement and community collaboration.

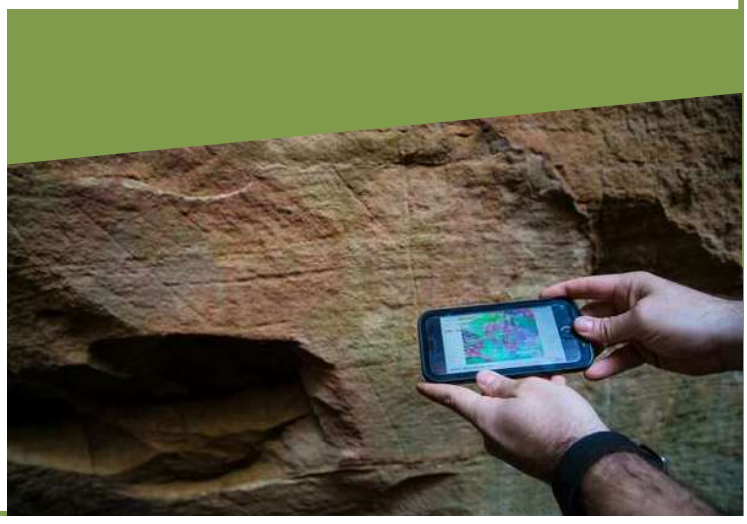
Outdoor Recreation Rural Toolkit (ORR):
The ORR toolkit provides resources and guidelines for rural communities to enhance outdoor recreation opportunities, leveraging technology and innovative design principles.

Recommendations:
Utilize the toolkit and incorporate emerging technologies and best practices. Offer training and support to help communities implement technology-driven solutions effectively.

The SCORP serves as a framework for strategic planning and development of outdoor recreation resources. By integrating tech into SCORP initiatives, innovative solutions can be realized.

Incorporating technology into outdoor recreation initiatives offers immense potential to cultivate connectivity and enhance experiences for individuals and communities. By leveraging mobile applications and innovative design principles, stakeholders can foster deeper connections with nature, promote community engagement, and inspire stewardship of outdoor resources. Technology also impacts the outdoor industry by enhancing user experiences, expanding accessibility, creating business opportunities, and helping it evolve to meet the demand for more personalized and responsible outdoor experiences.

Embracing the ethos of innovative connectivity ensures that outdoor spaces remain accessible, inclusive, and cherished for generations to come.



Priority 4: Support Public Wellness

Outdoor recreation plays a vital role in promoting health and wellness among residents of Arkansas. The state's diverse outdoor recreation facilities, settings, and programs contribute to healthy behaviors in several ways. Firstly, they offer opportunities for physical activity, helping to combat obesity and reduce the incidence of chronic diseases. Secondly, outdoor recreation activities can enhance mental health by connecting individuals with natural environments, which can alleviate stress and improve interpersonal relationships.

This connection between outdoor recreation and improved health is particularly significant in Arkansas. Arkansans report higher rates of poor physical and mental health days per year compared to the national average. In 2016, a significant portion of adults in Arkansas indicated that they engaged in minimal physical activity outside of their regular job duties.

Improving access to outdoor recreation can help address these health challenges. Recent research indicates that leisure activities, rather than work or housework, now comprise the majority of physical activity in people's lives. By offering opportunities for physical activity during leisure time, outdoor recreation services are increasingly recognized as essential components of the healthcare system in the United States.

Outdoor recreation significantly contributes to public health and wellness through its connectivity to various aspects of well-being:

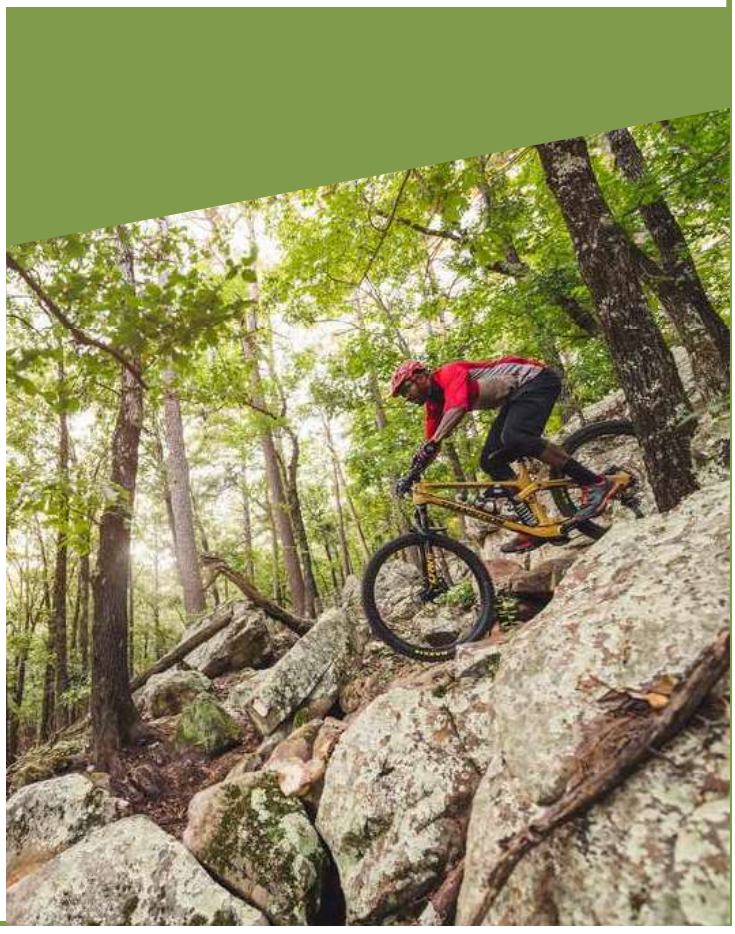
Physical Activity: Engaging in outdoor recreation activities like hiking, biking, and swimming fosters physical exercise, promoting a healthy weight, cardiovascular health, and reducing the risk of chronic diseases such as obesity and diabetes.

Mental Health Benefits: Spending time in natural environments during outdoor activities lowers stress levels, alleviates symptoms of anxiety and depression, and boosts mood and overall well-being. The social connections formed through outdoor recreation further enhance mental health resilience.

Stress Reduction: Natural settings have a calming effect, reducing stress and tension. Activities like nature walks and meditation in outdoor settings promote relaxation and mindfulness, supporting mental and emotional health.

Recognizing the points made above, in 2023, the Arkansas Department of Health and the Arkansas Department of Parks, Heritage and Tourism revitalized the Great Strides Program. This grant program was created for cities to develop walking trails and associated facilities, such as accessible parking, signage, and benches, further promoting healthy active lifestyles through outdoor recreation. It is funded with a portion of Arkansas' Master Tobacco Settlement award and was also completed as a recommendation from the Natural State Initiative report.

Overall, outdoor recreation serves as a vital connector to public health and wellness, offering opportunities for physical activity, stress reduction, mental rejuvenation, and the cultivation of lifelong healthy habits. Research consistently demonstrates that increased outdoor time correlates with lower community healthcare costs. Investing in outdoor recreation infrastructure and programs strengthens the connectivity between individuals, communities, and well-being.



Priority 5: Promote Environmental Stewardship

Arkansas is known as The Natural State. Our state boasts a wealth of natural wonders, including majestic mountains, pristine forests, scenic rivers, and picturesque lakes. The state is home to several national parks, forests, and wildlife refuges, such as the Ozark National Forest, Hot Springs National Park, Buffalo National River, and the Ouachita National Forest, which offer opportunities for hiking, camping, fishing, hunting, climbing, and wildlife viewing.

The state's commitment to conservation and environmental protection has contributed to its rich biodiversity and preserved natural landscapes.

Connectivity to the outdoors plays a crucial role in promoting environmental stewardship and conservation through several key mechanisms:

Awareness and Appreciation: By fostering connections to nature, outdoor experiences increase awareness and appreciation of the environment. Spending time outdoors exposes individuals to the beauty, diversity, and fragility of natural ecosystems, leading to a greater understanding of the importance of conservation efforts.

Personal Connection: Developing personal connections to specific outdoor spaces, such as parks, trails, and wilderness areas, fosters a sense of ownership and responsibility for their preservation. Individuals who have positive experiences in nature are more likely to advocate for the protection and conservation of these spaces.

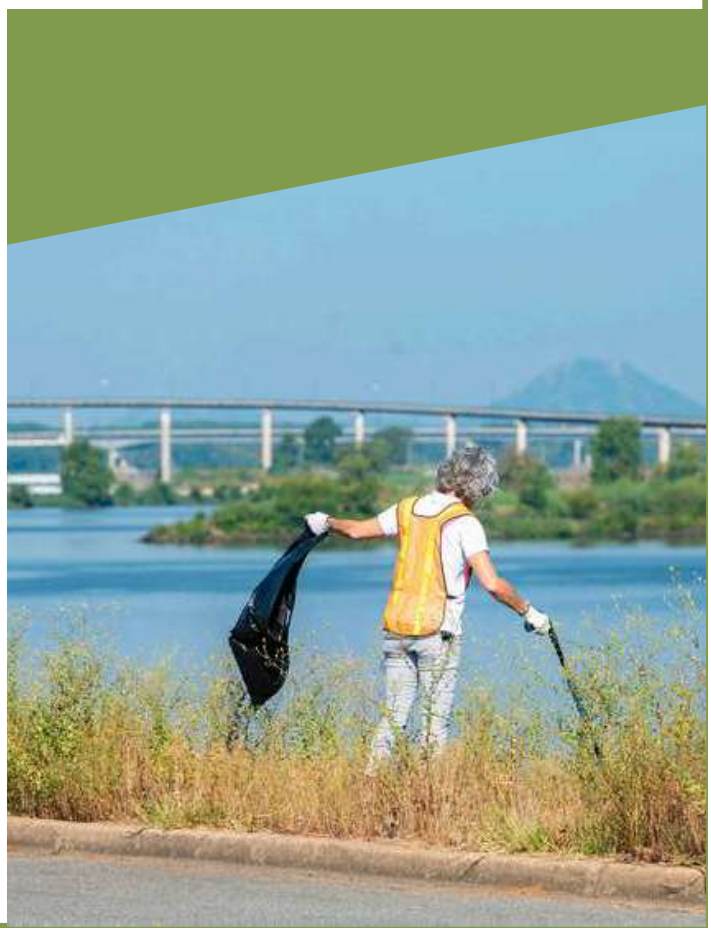
Education and Interpretation: Outdoor recreation activities often include educational components and interpretive programs that inform participants about local ecosystems, wildlife, and conservation issues. Learning about the natural world enhances understanding of ecological processes.

Volunteerism and Advocacy: Connectivity to outdoor spaces inspires individuals to become involved in conservation efforts through volunteer work, advocacy, and community engagement. Outdoor enthusiasts often participate in habitat restoration projects, litter clean-ups, trail maintenance, and advocacy campaigns to protect natural areas and wildlife habitats.

Sustainable Practices: Outdoor recreation encourages the adoption of sustainable practices that minimize negative impacts on the environment. This includes principles such as Leave No Trace, which promotes responsible behavior and stewardship ethics, such as packing out trash, staying on designated trails, and minimizing disturbance to wildlife.

Economic Value: Recognizing the economic value of outdoor recreation and ecotourism can provide incentives for conservation and sustainable management of natural areas. Protecting and preserving outdoor spaces not only maintains their ecological integrity but also supports local economies through tourism and recreation-related spending.

By cultivating a sense of responsibility and appreciation for the environment, outdoor recreation contributes to the long-term protection and sustainability of our planet's natural heritage.



ARKANSAS HERITAGE

Sarah Huckabee Sanders
Governor
Shea Lewis
Secretary

January 26, 2024

Katherine Andrews, Director
Office of Outdoor Recreation
Arkansas Department of Parks, Heritage and Tourism
One Capitol Mall
Little Rock, AR 72201

RE: Letter of support for land acquisition in the development of a Statewide Comprehensive Outdoor Recreation Plan

Dear Katherine Andrews:

The Arkansas Natural Heritage Commission (ANHC) is in support of the prioritization of land acquisition in the development of a Statewide Comprehensive Outdoor Recreation Plan (SCORP) for the state of Arkansas. The Arkansas State Parks, Outdoor Recreation Grants Program will be the lead in development of this plan, which is updated every five years.

A main goal of the ANHC is conserving Arkansas's natural landscape. One of the ways we do this is through our System of Natural Areas, currently at 79 natural areas with 74,102 acres. The Land and Water Conservation Fund (LWCF) has been important in acquiring many of those acres, providing protection to a variety of different natural communities such as prairies, glades, pine-oak flatwoods, swamps, and upland streams. These natural areas support a great deal of biodiversity, including rare and imperiled species.

In addition to serving as "living museums" these natural areas provide opportunities to the public for birding, hiking, hunting, nature photography, botanizing, and connecting better with nature. This in turn has important economic implications. Citizens visiting these sites spend money traveling to and from and often on lunch or dinner in local towns. Green spaces help businesses attract top talent to their locations and people who have access to outdoor recreation often have reduced healthcare costs.

The ANHC natural areas are a great example of how conservation and recreation interests work well together. The LWCF funds for land acquisition have been critical in that success. Many of our partners in the state have experienced similar success. That history and continued conservation and recreation needs makes it easy for the ANHC to endorse land acquisition as a priority in the development of the updated Arkansas SCORP.

Sincerely,

Bill Holimon, Director

Arkansas Natural Heritage Commission
1100 North Street • Little Rock, AR 72201 • 501-324-9150
NaturalHeritage.com

Arkansas Game and Fish Commission

January 31, 2024

Katherine Andrews, Director Outdoor Recreation

Department of Parks, Heritage and Tourism
One Capitol Mall
Little Rock, AR 72201

RE: Letter of support for land acquisition in the development of a Statewide Comprehensive Outdoor Recreation Plan

Dear Mrs. Andrews:

The Arkansas Game and Fish Commission (AGFC) fully supports the inclusion and prioritization of land acquisition in the development of a Statewide Comprehensive Outdoor Recreation Plan (SCORP) for the state of Arkansas, which is updated every five years under the lead of the Outdoor Recreation Grants Program within the Arkansas State Parks.

In support of our agency's mission to conserve and enhance Arkansas's fish and wildlife and their habitats while promoting sustainable use, public understanding and support, the AGFC has acquired approximately 400,000 acres of land and water that is managed and maintained through a system of Wildlife Management Areas (WMAs) for fish and wildlife habitat and public use. In addition, the AGFC collaborates with other conservation partners within the state to cooperatively manage another 2.6 million acres of public land across the Natural State. The Land and Water Conservation Fund (LWCF) has been important to AGFC and our conservation partners in acquiring lands across the state to both conserve areas for fish and wildlife habitat as well as provide much-needed public access for outdoor recreation opportunities such as hunting, fishing, hiking, paddling and wildlife viewing.

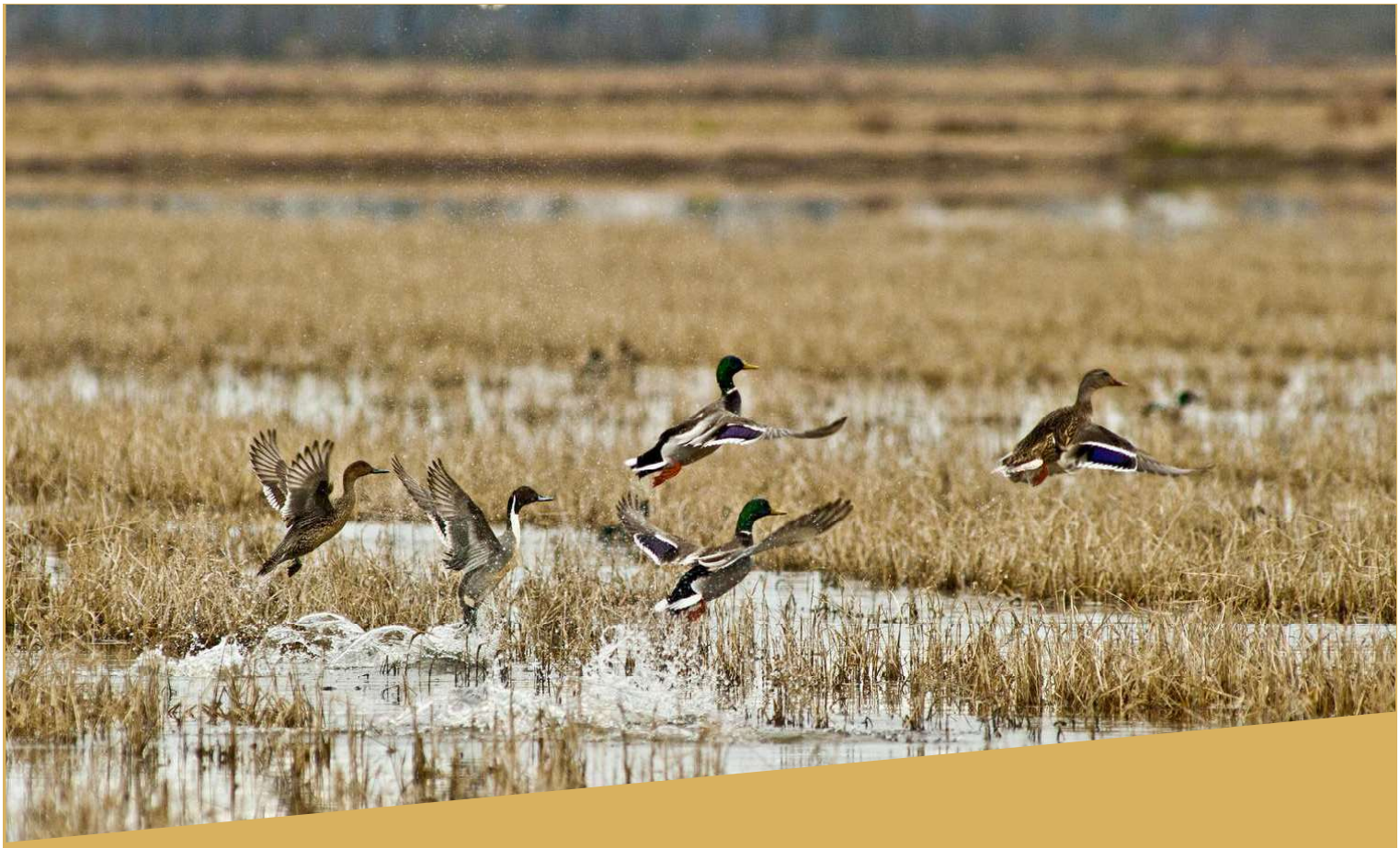
Recent data from the 2022 National Survey of Fishing, Hunting and Wildlife-Associated Recreation indicated that 1.6 million Arkansas residents age 16 and older participated in wildlife associated recreation (includes fishing, hunting and wildlife viewing) in 2022. Overall, state residents and nonresidents spent $12.5 billion on wildlife associated recreation in Arkansas in 2022. The existing system of public lands within the state, which exceeds 3 million acres, serves as a major component to the wildlife associated recreation economy for Arkansas. Recognizing the vital importance of public lands within our state for both fish and wildlife habitat conservation and outdoor recreation, securing additional acres of priority habitat for wildlife and public access is a stated goal within the AGFC Strategic Plan, Natural State Tomorrow. The past use of LWCF funds for land acquisition within the state has played an integral role in advancing conservation efforts as well as supporting outdoor recreation, but the need exists to expand our current network of public lands even further. Therefore, it is my pleasure to endorse land acquisition as a priority in the development of the updated Arkansas SCORP.

Sincerely,

Austin Booth

2 Natural Resources Drive, Little Rock, AR 72205
833-345-0325 | 501-207-0326 | agfc.com

The Arkansas Game and Fish Commission's mission is to conserve and enhance Arkansas's fish and wildlife and their habitats while promoting sustainable use, public understanding and support.



Appendix

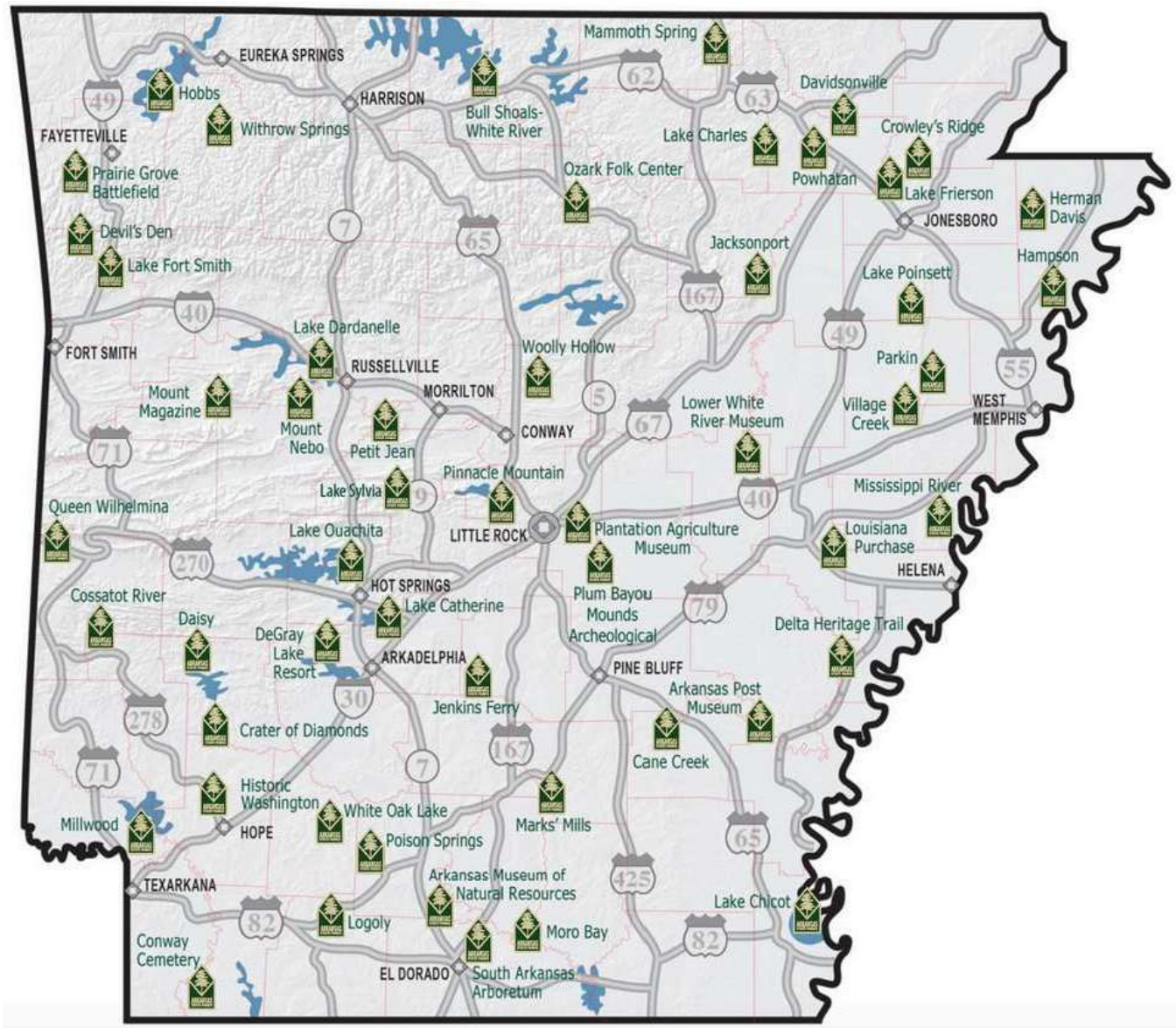
State Wetlands Narrative

Wetlands play an essential role within our interconnected ecosystems. These ecotones, transitional zones bridging land and water, act as vital buffers, filters, and anchors, ensuring the equilibrium and functionality of larger ecological systems. Furthermore, wetlands function as indispensable sanctuaries, offering unique and irreplaceable habitat for populations of threatened and endangered species. They also serve as the exclusive flyway for numerous migratory birds, guiding them on their seasonal journeys. Despite constituting only 8% of Arkansas' landmass, wetlands hold disproportionate significance for the state. They provide a multitude of invaluable environmental services, such as flood control, water purification, and nutrient cycling. Additionally, these vital ecosystems offer substantial economic benefits, supporting millions of migrating waterfowl and contributing significantly to the cultural and economic identity of eastern Arkansas. Notably, the Cache-Lower White River system, recognized for its global importance at the Ramsar Convention, stands as the world's duck-hunting capital due to its extensive and thriving wetland ecosystems. This system exemplifies the critical role wetlands play not only for biodiversity and environmental health, but also for the economic and cultural fabric of surrounding communities.

Palustrine scrub-shrub wetlands across the U.S. have experienced a significant decline, with a 96,500-acre loss between 2009 and 2019. This decrease is primarily attributed to human alteration and a transition to forested wetlands. These wetlands provide valuable flood risk mitigation services and critical habitat for numerous species. However, the trend indicates a broader shift, with remaining wetlands more likely to be emergent rather than forested. This ongoing decline underscores the need for conservation efforts to address habitat loss and the changing composition of wetland ecosystems.

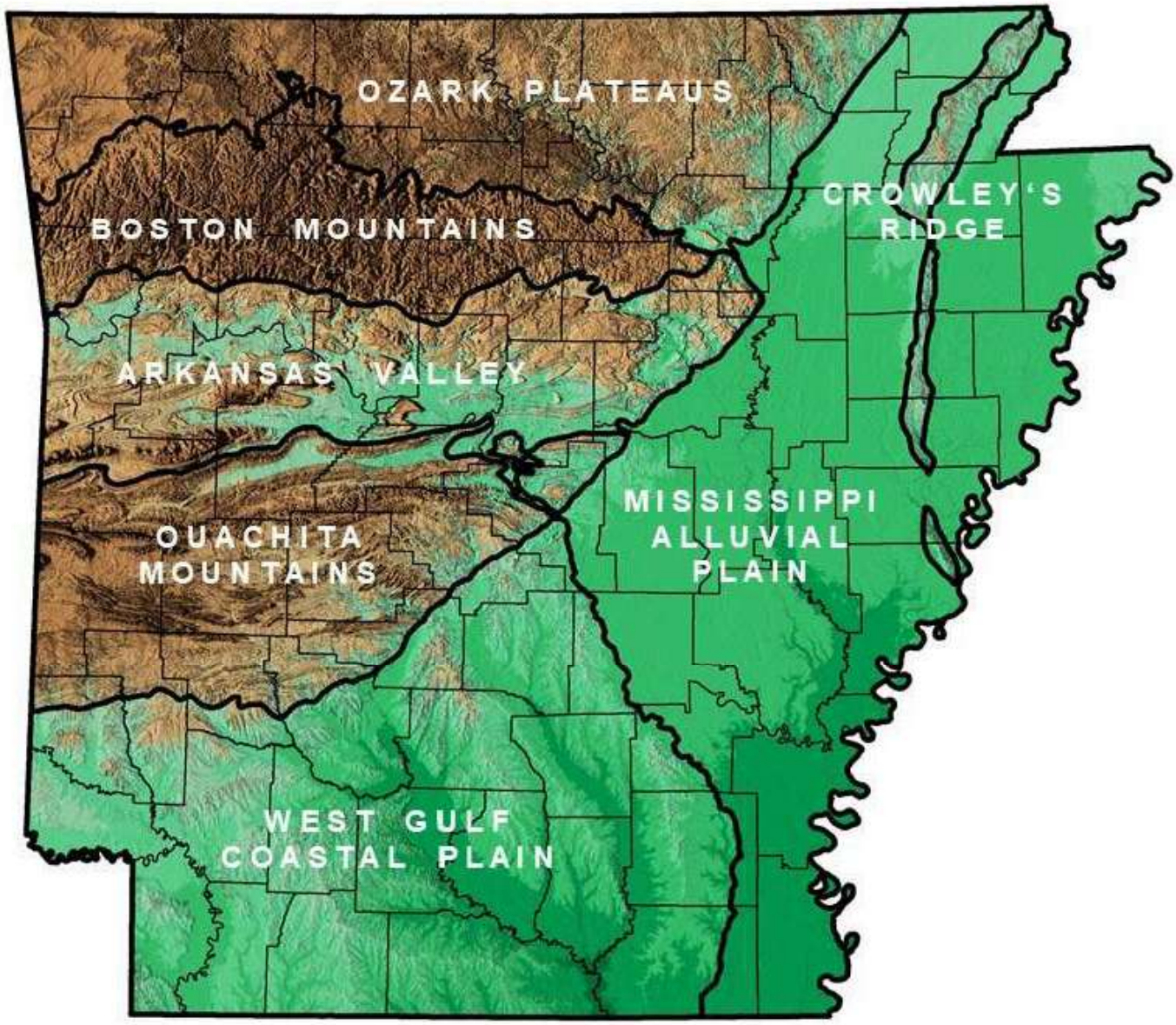
Arkansas State Parks Map

Arkansas State Parks offer a diverse array of natural beauty and recreational opportunities, showcasing the state's rich landscapes and cultural heritage. From the rugged beauty of the Ozark Mountains to the tranquil forests and lakes of the Ouachita region, each park offers a unique experience for visitors to explore. Whether it's hiking through scenic trails, camping under the stars, or enjoying water activities like fishing and boating, Arkansas State Parks provide endless opportunities for adventure and relaxation amidst breathtaking scenery. Additionally, many parks feature historical sites, interpretive programs, and educational exhibits, allowing visitors to delve into the state's history and conservation efforts. With 52 parks scattered throughout the state, there's always a new discovery waiting to be made in Arkansas' outdoor playground.



Arkansas Eco Regions Map

A natural division or ecoregion (ecological region) is a geographical area occupied by a distinctive ecosystem. An ecosystem can be defined as an environment made up of interrelated living and non-living components. The seven main ecoregions of Arkansas are labeled in white in the map below. These can be further divided into smaller ecoregions. Ecoregions are not bound by state boundary lines, and most extend into adjoining states.



Arkansas Resident Survey

Executive Summary

In April 2022 the Outdoor Recreation Grants Program (ORGP), within the Office of Outdoor Recreation, contracted with Arkansas Tech University to develop, facilitate, and provide analysis for two surveys within the Statewide Comprehensive Outdoor Recreation Plan (SCORP) framework, a resident survey and a provider survey. In collaboration with staff from the ORGP, the researcher developed and launched the two surveys for participation on May 1, 2022 and data collection concluded September 15, 2022. Arkansas residents reported participating in a wide range of outdoor recreation activities across all regions and counties in the state. Respondents to this survey did not perceive any significant barriers to their participation in outdoor recreation and respondents reported a wide array of motivations for outdoor recreation participation.

Methodology

The 2022 Statewide Comprehensive Outdoor Recreation Plan (SCORP) resident survey was published and active for participation from May 1, 2022 to September 15, 2022.

The principle investigator developed an email introducing the SCORP process and resident survey in May 2022. This email included information about the history of SCORP, the history of SCORP in Arkansas, surveying anonymity and confidentiality information, and a link to the online survey. The email included the request to help distribute the information and link to the survey. This email was labeled “initial contact email” for further use across the data collection process. Due to the data collection methodology, the information attained through this process is best viewed as a convenience sample.

For each county in Arkansas, the principle investigator sent the initial contact email to specific individuals:
a) The mayor and/or mayor’s administrative assistant for each city or town with a 2020 US Census count of 500 or more individuals
b) The county judge and/or judge’s administrative assistant for each county
c) Additionally, the principle investigator compiled a list of religious institutions in each county. From there, the investigator developed an extensive contact list for leadership and/or administration personnel for as many religious institutions as possible, dependent on availability of contact information.

Additionally, several other organizations and nonprofits entities communicated with the principle investigator and agreed to distribute the survey information and survey link to their networks. This included, but may not be limited to, the following:
a) Arkansas Game and Fish Commission (AGFC)
b) The Nature Conservancy (TNC)
c) The Arkansas Environmental Education Association (AEEA)
d) Arkansas State Parks

In all, 8,196 persons clicked on the survey link with 175 persons unable to continue the survey (68 were not aged 18 or older, 107 declined to consent). Responses in the survey are included up to the moment the respondent discontinued the survey.

*full report available upon request

Arkansas Recreational Providers Survey

Executive Summary

In April 2022 the ORGP, contracted with Arkansas Tech University to develop, facilitate, and provide analysis for two surveys within the Statewide Comprehensive Outdoor Recreation Plan (SCORP) framework, a resident survey and a provider survey. In collaboration with staff from the ORGP, the researcher developed and launched the two surveys for participation on May 1, 2022 and data collection concluded September 15, 2022. Arkansas recreation providers (agencies) reported offering in a wide range of available outdoor recreation areas, facilities, and activities across all regions and counties in the state. Responding agencies reported a wide range of needs and varying priorities related to maintenance and upkeep of areas, facilities, and programs. Visitations estimates were wide ranging as were social media use to distribute information. Most agencies reported seeking out grants to facilitate projects in their agency.

Methodology

The 2022 Statewide Comprehensive Outdoor Recreation Plan (SCORP) provider survey was published and active for participation from May 1, 2022 to September 15, 2022.

The principle investigator developed an email introducing the SCORP process and provider survey in May 2022. This email included information about the history of SCORP, the history of SCORP in Arkansas, surveying anonymity and confidentiality information, and a link to the online provider survey. Additionally, since many agencies manage several properties, communication included sending the survey link to managers of the properties for completion. For example, an agency administrator may send the link to the individuals managing specific properties for completion. Due to the data collection methodology, the information attained through this process is best viewed as a convenience sample.

The principle investigator sent an initial contact email to specific individuals to elicit agency participation in the survey. This included the following:

a) Arkansas Game and Fish Commission (AGFC)
b) The Nature Conservancy (TNC)
c) Arkansas State Parks
d) Arkansas Recreation and Park Association (ARPA)
e) United State Forest Service (USFS)
f) Army Corps of Engineers (ACE)
g) National Park Service (NPS)
h) Arkansas Association

In all, 107 persons clicked on the survey link with 65 persons completing the entire survey. Responses in the survey are included up to the moment the respondent discontinued the survey.

*full report available upon request

Arkansas SCORP Forums Report

Executive Summary

From June to September 2022, Michael Bradley, Associate Professor at Arkansas Tech University, developed, facilitated, and reported on regional outdoor recreation leadership forums. In collaboration with staff from the ORGP, the researcher identified 7 regional state parks, a conference, and an online opportunity to facilitate the leadership forums. With notes from those leadership forums, the researcher identifies the top trends related to current and future outdoor recreation issues in Arkansas as well as recommendations for future iterations of the SCORP process for Arkansas.

Methodology

In April 2022 the ORGP, contracted with Arkansas Tech University to develop, facilitate, and report on regional outdoor recreation leadership forums to provide context and information for the forthcoming Statewide Comprehensive Outdoor Recreation Plan (SCORP). In collaboration with staff from the ORGP, the researcher identified 7 regional state parks, a conference, and an online opportunity to facilitate a total of 9 leadership forums.

Each forum followed the same agenda: personnel introductions, an introduction to SCORP, and the leadership forum agenda (10-20 minutes), a discussion time designated to the current state of outdoor recreation in Arkansas (30-45min), a discussion time designated to future outdoor recreation trends in Arkansas (30-45min), and a discussion time designated to thoughts and recommendations for the future of the SCORP process in Arkansas (30-45min). Due to the variation of attendees and discussion progress, the time spent on each topic fluctuated per meeting, however, the discussion facilitator interjected when discussion topics lasted more than 40 minutes. The number of attendees fluctuated per forum, with the lowest attendance being 5 and the highest attendance being 14.

The list of forum sites included 7 state parks, an annual conference related to recreation in the state, and an online forum opportunity:
Lake Chicot State Park – June 20, 2022
Crater of Diamonds State Park – June 23, 2022
Ozark Folk Center State Park – July 20, 2022
Lake Dardanelle State Park – July 25, 2022
Devils Den State Park – July 26, 2022
Pinnacle Mountain State Park – July 27, 2022
Crowley's Ridge State Park – July 28, 2022
Online Forum – August 17, 2022
ARPA Forum – August 31, 2022

The researcher sought to identify outdoor recreation providers of all types in a geographic region surrounding each identified location. This includes leadership at the municipality, county, region, state, and national levels working in the area. Across all forums, represented agencies included the National Park Service, the US Forest Service, US Army Corps of Engineers, Arkansas State Parks, Arkansas Game and Fish Commission, numerous county and municipal recreation leaders, numerous recreation leaders in the nonprofit sector, and some elected officials.

With notes from those leadership forums, the researcher identified the top issues noted by individuals attending the forums. These topics were in reference to the agenda for the forum: current and future outdoor recreation issues in Arkansas and recommendations for future iterations of the SCORP process in the state.

*full report available upon request

Research and Innovation

Nature Gap: Why Outdoor Spaces Lack Diversity and Inclusion

December 14, 2020 | Emma Stuck | 7-min. read

Photo by Mike Lento via Unsplash

Research shows that people of color are far less likely to engage in nature-based outdoor recreation activities, with historic discrimination being a large underlying factor.

At NC State's College of Natural Resources, researchers firmly believe that the outdoors can become more inclusive once the narrative changes, from emphasizing achievements of people of color in outdoor recreation to having more diverse leadership in outdoor recreation agencies, organizations and advisory boards.

The history of public park systems and current-day prejudices against people of color are two areas that reinforce each other and prevent higher participation from people of color, according to KangJae "Jerry" Lee. Lee, an assistant professor in the Department of Parks, Recreation and Tourism Management, has authored numerous studies about racial discrimination in park participation, outdoor leisure and sports.

Participation and attendance at state and national parks, as well as forest areas, tend to be disproportionate between white people and people of color. The reasons behind this go beyond the fact that people of color are three times more likely than white people to live in places that have no immediate access to nature.

"There are a couple of different theoretical explanations that have been provided by different researchers," Lee said. "Socioeconomic status, cultural differences, racial discrimination and the history of institutional racism. In my personal opinion, the most reasonable explanation is the last one, the historical racial discrimination: we are the products of our past."

Beginning with slavery, a long history of racial oppression, including job discrimination, redlining (refusal from the Federal Housing Administration to insure mortgages in and near Black neighborhoods) and lack of sufficient access to housing, has caused a disparity in income between persons of color and white people. People of color tend to have higher unemployment rates and lower income levels, leading to less disposable income to take trips for outdoor recreation. If you are low income, you don't necessarily have vacation time to take trips to state and national parks.

However, people of color in the middle class who have disposable income and discretionary time may not even choose a nature-based vacation. "One idea is that if people of color have the same income levels, they will participate in outdoor recreation or visit parks as much as their white counterparts," Lee said. "But this is an anglo-confirmative bias, meaning that it normalizes white Americans' leisure behavior as a benchmark. Moreover, existing empirical studies do not support the idea."

A history rooted in discrimination

The lack of diversity and inclusion in outdoor spaces can be traced back to the very beginning of parks, especially to the individuals who created the park system and for what reasons, according to Myron Floyd, dean of the College of Natural Resources and lead author of several studies exploring race and ethnicity in parks and outdoor recreation.

Throughout history, parks in the United States have been conceptualized, created and managed by white men who held racist beliefs. People of color were rarely considered to be major stakeholders in outdoor recreation or park-related activities. People of color have experienced segregation from a multitude of outdoor recreation agencies, including the Civilian Conservation Corps and National Park System.

"The underlying rationale for creating parks was this idea of U.S. nationalism, to promote the American identity, and the American identity was primarily white, male and young," Floyd said. "It was really trying to distinguish the American identity from the European identity: being a separate, more mature nation in the mid-19th century."

John Muir, who is credited with the creation of the National Park System and the conservation movement, was recently called out for his long history of racism by the Sierra Club. For Muir, who co-founded the organization in 1892, Indigenous people "seemed to have no right place in the landscape" despite the fact that they had lived there for thousands of years. He also believed that Indigenous peoples' villages and their ways of life should be destroyed in order to have "unblighted, unredeemed wilderness."

Other important figures in the conservation movement, like Gifford Pinchot, the first head of the U.S. Forest Service, held racist beliefs and believed that parks were created for Americans of only Northern European descent. "These are ideas that are antithetical to democracy, egalitarian principles and basic human rights," Floyd said.

Unease in the outdoors

For white Americans, the ability to visit a park or plan a hiking trip with little to no concern is a privilege that is rarely considered. However, for people of color, they have to plan trips and gather friends or family to go with them or make sure they go hiking in groups.

"They think twice about going outside and going to remote places where they are not familiar with their surroundings," Floyd said. "Black people and other people of color have to think really hard about being in outdoor spaces and being seen as out of place because the white majority can perceive people of color to be out of place in outdoor spaces."

Two recent incidents that demonstrate this cause for concern include the killing of jogger Ahmaud Arbery in Georgia and the racial targeting of Christian Cooper in Central Park, both of which occured this year. These incidents involving two Black men provide clear examples of the not-so-subtle discrimination that continues to pervade minorities in outdoor spaces across the U.S.

In May, Arbery ventured outside for an afternoon jog in the coastal neighborhood of Satilla Shores when he was confronted by a white man, Gregory McMichael, and his son, Travis McMichael. Gregory reported that he believed Arbery, unarmed, resembled a man suspected of several nearby break-ins. Gregory grabbed a handgun — and a shotgun — and chased Arbery in his pickup truck to cut him off. After pulling up to Arbery, Travis got out of the car with the shotgun. When Travis and Arbery began fighting over the shotgun, Travis killed Arbery.

During the same month, nearly 900 miles away in New York City, Cooper, an avid birdwatcher, was spending his morning searching for Blackburnian warblers in Central Park. His birdwatching was disturbed by another resident, Amy Cooper, who had been loudly calling for her dog. He approached her to politely ask if she could put a leash on her dog, per the park rules, and she refused. After he started recording the exchange, Cooper called 911 to report that "an African-American man is threatening me and my dog."

Contributions to the great outdoors

A lack of diversity in the outdoors doesn't equal a lack of interest among people of color. The Cooper incident led to the creation of Black Birders Week, for example. This weeklong social media event celebrated Black outdoor enthusiasts, naturalists and conservationists. It also served to break down stereotypes of Black people in the outdoors and STEM.

"We have data that shows that people of color care more about the environment than white Americans do," Floyd said. "During economic downturns, people of color would draw their support from environmental concern because they had more concern for food, shelter and other basic needs."

A number of organizations are at the forefront of promoting diversity and inclusion in outdoor spaces, including Outdoor Afro, Black Outside, Latino Outdoors and GirlTrek. With about 90 leaders in 30 states, Outdoor Afro is a nonprofit network of people of color who are passionate about leading the way for inclusion in outdoor recreation, nature and conservation. According to Floyd, a lot of this grassroots activity is not being captured in research surrounding diversity in the outdoors.

Throughout history, Black people have made distinctive contributions in the outdoors. For example, some of the most skilled hunters and fishers in the post–Civil War South were Black people. At Mammoth Cave National Park in Kentucky, Black people were instrumental in making discoveries and promoting the world's largest known cave as a tourist destination. In addition, Indigenous peoples played a key role in preserving the land where many parks sit today.

"If we look at our history more carefully, despite our many challenges, pressures and difficulties imposed by white people, people of color did find a way to enjoy outdoor recreation, which is remarkable," said Lee. "We need to shift our dialog from 'Blacks don't do it, Blacks don't do it, Blacks don't do it' to 'No, no, no. Blacks did it, and despite all odds, they found a way to enjoy outdoor recreation and they made significant contributions to national parks and the great outdoors in the United States.'"

Paving the way for outdoor diversity

A major factor in combating the lack of diversity and inclusion in the outdoors is changing the narrative driving the problem, according to Floyd.

"We need to change the narrative – that people of color do go to parks," he said. "Yes, the levels are low but people are out there participating in outdoor recreation and the agencies have so much room and opportunity to make outdoor recreation more diverse and inclusive."

Parks also need to reinforce values of diversity and inclusion, especially in their marketing strategies. According to Lee, previous studies have documented that images of individuals and families enjoying outdoor recreation at parks tend to be dominated by white people.

Telling the stories of how people of color helped make the outdoors great is an essential marketing strategy for park agencies, organizations and private companies. A number of outdoor recreation companies, including REI, Dick's Sporting Goods and Cabela's, are recognizing the lack of diversity in their marketing. One recent example of more diverse marketing is a Subaru commercial that shows a Black family driving to Arches National Park in Utah. Still, public parks and recreation agencies have been slower in their diversity and inclusion marketing.

Another important step that parks can take to improve diversity is to ensure the safety of guests and to create welcoming environments, with policies in place to ensure a greater sense of security. That includes a separate phone number for non-life-threatening situations.

Floyd said a more diverse staff and leadership, in addition to advisory boards, can also hopefully lead to more diversity in outdoor recreation programming and resource allocation.

Categories: Impact and Outreach, Parks, Recreation and Tourism Management Research, Research and Innovation
Tags: parks recreation and tourism management, prtm-research

"The public is diversifying and it's up to the agencies to determine how to serve them and meet their recreational needs," he said. "We have to focus attention on the organizations and agencies that provide outdoor recreation and manage land and water."

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INTEGRATING OUTDOOR SCHOOL LEARNING INTO FORMAL CURRICULUM: DESIGNING OUTDOOR LEARNING EXPERIENCES AND DEVELOPING OUTDOOR LEARNING FRAMEWORK FOR PRE-SERVICE TEACHERS

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ABSTRACT

This study focuses on designing outdoor school learning experiences integrated into curriculum to provide motivation for achieving curriculum's learning objectives. Within this study, pre-service teachers have experienced outdoor learning as a part of formal curriculum of their elective course. After experiencing outdoor activities in outdoor school environments, their perceptions have been explored about influences of outdoor school learning. Considering the nature of outdoor learning, this study includes 28 undergraduate students studying at Social studies education (n=10), Pre-school education (n=8), Turkish language education (n=6) and Primary school education (n=4). This study adopts document analysis as research design, uses researcher's observation notes and pre-service teachers' written reflective diaries about outdoor learning environments as data collection tools. Data analysis indicates that pre-service teachers enthusiastically support designing the curriculum of a course with outdoor learning experiences. They list "museums (n=21)", "science centers (n=20)", "national parks (n=18)", art galleries and artists' studios (n=18), planetariums (n=15), botanic gardens (n=12), historical places such as madrasah, castle (n=11), places of business -including industry & media (n=10), nature itself (n=10)- as outdoor learning environments. They consider the most convenient learning activities in outdoor settings as "making experiments (n=20)", exploration tasks (n=17), creativity tasks (n=17), "imagination tasks (n=16)", "collaborative tasks (n=16)" and "observation tasks (n=14)", "reflection tasks" (n=12). They regard "teachers' level of professionalism (n=17), students' well-being in the learning environment (n=15)" as the most important factors facilitating outdoor school learning. Also, data analysis indicates that outdoor school learning is efficient in terms of three domains: personal development including greater sense of confidence, autonomy, motivation and curiosity; social development including respect for environment, connectedness, social interaction, sense of social responsibility, outdoor leadership; and lastly school-related development including school adjustment, flexible learning/curriculum, active commitment, course adaptability, attention to the content, critical thinking, real-life learning experiences.

Keywords: Outdoor school learning environments, experiential learning, outdoor education, integration of outdoor learning into curriculum.

INTRODUCTION

Within the education systems across the most countries, there is an emerging trend of supporting outdoor learning activities within formal curriculum at pre-school, primary, secondary school and higher education. Learning in the classroom begins to include learning outside the school by observing and experiencing inside the real life. It is felt that outdoor environments and nature have a big potential for learners from all ages. Therefore, there is an increase in courses for instructors which guide them how to design effective learning activities, experiential practices and create both individual and group learning tasks within outdoor education. Learning which takes place outer-world is not easy to accomplish as it sounds at first glance, because integrating outdoor learning into formal curriculum demands more effort and time than normal in-class activities. As implied by Rillo (1980), early educators such as Johann Amos Comenius, Jean Jacques Rousseau, Pestalozzi, and Froebel put emphasis on the use of nature, however outdoor education really began pretty much earlier with the first teaching-learning act which occurred outdoors, after adaptation of human-being to outdoor experiences. According to Rillo (1980), unfortunately, after such a good start, educational system and curriculum developers neglected the outdoor learning aspect, which can be seen in relatively weak presence of outdoor learning programs across many countries. Rillo (1985, p.7) explains outdoor education as ""all of that learning included in the curriculum in any subject matter area and at any grade level which can best be learned outside the classroom". Outdoor school learning is a broad term which covers many topics such as outdoor education, experiential learning, recreational learning, forest schools, nature education and outdoor school learning. According to Donaldson and Goering (1970), outdoor education is a "post-World War II" phenomenon in the United States despite some well-intended but inadequate initiatives earlier. An important event in this process is enactment of the Elementary and Secondary Education Act in 1965 in USA which allows educators to perform activities under the broad term of outdoor education (Paul, 2016). Phyllis (1986) draws attention that although educational institutions, state and local government agencies, and private institutions support outdoor education programs, outdoor education has no nationally standardized curriculum or measures of competency. Phyllis defines outdoor education as "education in, about, and for the out-of-doors." This definition clarifies some certain aspects such as where the learning takes place (in any outdoor setting), the topic to be taught (aspects related to the environment), and the purpose of the activity (developing knowledge, skills or attitude. As seen in his explanations, it can be claimed that outdoor education is a broad term referring to organized outdoor learning (Asfeldt, Purc-Stephenson, Rawleigh & Thackeray, 2020). Outdoor learning is first and above all characterized as an educational context, then as a location outside school which provides first-hand experiences and learning within authentic activities. Learning and Teaching 2010 Report makes it public that outdoor learning is an educational context which allows meaningful and relevant learning and encourages making connections experientially, leading to deeper understanding in curriculum areas while enriching the curriculum itself (Brown, 2010). This report is crucial as it has vision for progressive outdoor learning experiences through a combination of school-based outdoor learning and residential programmes. This report exemplifies outdoor learning such as the school grounds, visiting the local woods, exploring and engaging with the local community and developing a

school travel plan. Crim, Desjean-Perrotta and Moseley (2008) explain that outdoor settings include immeasurable learning possibilities in every curricular domain in early childhood education, however, early childhood educators might miss the connection between pedagogy and outdoor learning experiences. They might be oblivious to those learning possibilities in outdoor school learning as they might have lacked the experiences in natural outdoor settings when they were kids. However, as implied by Elliott (2010), socio-cultural developmental theories reveal that children at early ages learn through active physical engagement in surroundings. Elliott regard the contact with outdoor as important for health and well-being as daily food and sleep. This situation indicates the benefits which are gained by outdoor learning and it requires teacher training programs to educate enthusiastic teachers about outdoor education who are knowledgeable about integrating outdoor learning into curriculum.

Sjöblom and Svens (2018) address Finnish nature schools as good examples by claiming that these nature schools offer outdoor programs for classes in natural environments. Their primary importance is that they intend to contribute to the objectives of the national curriculum in various subjects. 10–11-year-old pupils participating in the study accept that nature school learning supports cognitive, affective, social and practical skills learning. Sjöblom and Svens (2018) stress the importance of reflection on learning in order to increase students' awareness of their outdoor learning. Likewise, Harun and Salamuddin (2013) assert that although it is not recognized the strength of the concept of outdoor education due to its being new and might involve high-risk, outdoor education programs are considered very appropriate to the 21st century educational system as they deal with three domains of learning: psychomotor, cognitive and affective domains. They list the importance and benefits of outdoor education as "expanding individuals' potential, knowledge, and improving and sharpening the intellectual ability of students". They draw attention to a key point that while instruction in a classroom focuses on the theory and understanding of concepts, outdoor education focuses on developing learners' talents and potential.

When it comes to Turkish education system, outdoor education -specifically nature education- gains importance in recent years and becomes popular as a subject of research in educational studies (Karadoğan, 2016). When the body of literature in Turkey is reviewed, it is seen that researchers focus on geography instruction in outdoor settings (Çiftçi & Dikmenli, 2016; Taşoğlu, 2010), student and teacher views on outdoor education (Tatar & Bagriyanik, 2012), social studies and history teaching using outdoor learning environments (Coşkun Keskin & Kaplan, 2012; Galip & Öztürk, 2019), planetariums in outdoor education (Sontay, Tutar & Karamustafaoglu, 2016), outdoor learning early childhood (Zeynep, Akgümüş & Cavalı, 2012), teaching Turkish to 4th graders supported by outdoor learning activities (Çobanoğlu & Gül, 2017), effect of outdoor activities on scientific process skills (Civelek & Akamca, 2018). Also, scientific national projects which focus on outdoor education and out-of-school learning are supported by TÜBİTAK 2237 and TÜBİTAK 4004 Nature Education and Science Schools. Aslan and Demircioğlu (2018) make content analysis of studies carried out in outdoor learning environments and they stress that outdoor learning environments support enriching students' learning experiences, their socializing process and deeper learning. They examine postgraduate studies in Turkey related to out of school learning

environments and identify a total of 40 (8 Ph.D., 32 graduate thesis) studies. It is seen that outdoor learning is more common in the field of science, with secondary school students and teachers. Science centers, museums, and zoos are generally preferred for outdoor education. Additionally, content analysis indicates that learning in non-formal settings enhances student achievement, develops scientific process skills, and positively affects attitudes and motivations towards the course. In study of Mutlu and Çelik (2019), it is claimed that out-of-school learning environments are effective in terms of students' actively learning by doing, concretizing abstract concepts within a given content in science discipline, and long-lasting learning. They find out that most research in outdoor learning focus on student opinions of out-of-school learning environments, the importance of out-of-school learning environments in teaching science, the difficulties encountered when visiting such environments and the effects of out-of-school learning environments on academic success and students' attitudes. It is felt that there is need studies which focus on what kind of outdoor learning activities can be designed in out-of-school locations and what tasks students can have especially through providing a detailed procedure.

Karadoğan (2016) expresses that outdoor learning environments have a really wide range which includes out-of-school/classroom practices and activities that will complement formal education, especially in natural sciences; excursion-observation and field studies, trips and visits to social, cultural, industrial and scientific places (museums, natural history museums, science and technology museums, planetariums, arboretums and botanical gardens, zoos, meteorology station, water treatment plant, dams, industrial establishments, etc.), virtual reality applications, nature trainings, environmental clubs activities, homework and projects directly related to the place, sports activities (especially nature sports), social and cultural and scientific programs (exhibitions, meetings, congresses, panels, conferences and symposiums), sports activities for nature sports, spatial arrangements and practices for lifelong learning, and self-learning environments. Locations and environments which can serve as outdoor learning setting are not limited to those areas, or they are not just about forests, castles and museums. A physical or virtual setting outside school which is designed as a learning environment will help students explore and learn the content. Therefore, when the potential educational value of outdoor school learning is considered, it will be a reasonable policy to embrace outdoor learning at schools and corporate it into curriculums. Ernst (2014) claims that there are some limitations in use of outdoor settings which might discourage teachers from conducting out-of-school activities such as lack of time, inconvenience of weather, walking access to natural outdoor settings and safety concerns. However, according to him, despite limitations, the use of outdoor education and natural outdoor settings should be supported as they serve as key learning opportunities for young children. Harun and Salamuddin (2013) also specify that outdoor education learners sometimes do not learn any input other than merely enjoying the activities in the setting, and the reason is because the activities are planned nonchalantly and as a result this reduces students' interest in the program. With more attention and effort in natural outdoor settings, with help of a well-planned outdoor learning procedure, educators can maximize their benefits from out-of-school learning settings. In relation to this issue, Donaldson and Goering (1970) identify basic principles for a successful understanding of outdoor education. The principles which might guide a better outdoor learning experiences are summarized as:

1. Outdoor education is a method or process utilizing the outdoors.
2. Outdoor education is not a separate discipline; it has no subject matter of its own.
3. Direct experiences in the outdoors are essential to the understanding of one's environment and, thus, to general education.
4. Useful outdoor experiences may be as brief as a few minutes or as long as several days or weeks.
5. A comprehensive outdoor education program provides direct experiences in the outdoors for all children at all grade levels.
6. Outdoor education involves the learner; emphasizes the exploratory approach; and utilizes multisensory experiences.
7. Outdoor experiences should be an integral part of modern education.
8. Outdoor education can be utilized to develop the understandings and skills necessary for the wise use of leisure time.

There are a large number and variety of out-of-school learning environments which will complement formal learning at schools; however, despite the existence of such a wide variety of application areas, there are many problems and deficiencies in the implementation of outdoor learning (Karadoğan, 2016). These deficiencies in implementation of outdoor learning sometimes stem from teachers' concerns about teaching out-of-classroom. This leads to students' missing out positive and educationally valuable experiences. Teacher training programs in Turkey provide pre-service teachers with courses such as "museum education, outdoor school learning environment" about educational value and implementation of outdoor learning. Donaldson and Goering (1970) refer to this necessity by implying that teacher education programs should include trainings about outdoor education and attempt to provide for students with an understanding of the values of outdoor education, its relationship to the school curriculum, skills in planning for outdoor experiences, an appreciation of the values of living in a peer community, and being concerned with total development of the child.

To sum up, there are some potential difficulties in implementation of outdoor learning activities, however, with some forethought and well-organized plan, it is possible to solve these potential difficulties and then make use of the opportunities of outdoor learning. In this study, outdoor learning activities are designed which are integrated into curriculum and pre-service teachers have experienced outdoor learning as a part of curriculum of an elective course. Then, this study focuses on exploring what pre-service teachers think about outdoor school learning. A unique aspect of this study is that the outdoor learning activities are experienced by pre-service teachers within the context of a formal curriculum. There has been made an effort to reduce the artificial distinction between school and outside, make a connection between formal school curriculum and out-of-school learning.

The purpose of this study is to integrate outdoor school learning into formal curriculum, and design outdoor learning experiences for pre-service teachers in an elective course; and then attempts to identify the perceptions

of pre-service teachers about outdoor learning environments for educational purposes. At last, this study aims to develop a framework for outdoor school learning. Accordingly, this study has the following research questions:

1. What are the perceptions of pre-service teachers about outdoor learning integrated into formal curriculum?
2. Which locations and spaces are regarded as outdoor learning environment by pre-service teachers?
3. What difficulties do pre-service teachers have during outdoor learning environments?
4. What kind of framework does reflect the concept of outdoor learning?

METHOD

This research uses document analysis as its research design which is among qualitative research methods. The document analysis in this research includes documents which are diaries, reflective writings of pre-service teachers and observational notes kept by the researcher within the scope of the "Outdoor School Learning Environments" course. Document analysis is a qualitative research method used to carefully and systematically analyze the content of written documents (Wach, 2013). Like other methods used in qualitative research, document analysis also requires the analysis and interpretation of data in order to make sense, create an understanding about the relevant subject, and develop empirical knowledge (Corbin & Strauss, 2008). Types of documents that can be used in research are advertisements, agendas, attendance records, invitations, meeting notes, manuals and guides, notes, books and brochures, diaries, journals, program records, letters, memoranda, maps, charts, newspapers, artworks, program details, radio TV program scripts, organizational reports, survey data, various public records, notebooks, photo albums, etc.; these documents provide data to researchers to be used in research (Labuschagne, 2003). Participant observation is also seen as an effort to test the validity of the information in process of comparing data obtained through document collection (Patton, 1990). Figure 1 includes the steps of document analysis suggested by Kıral (2020):

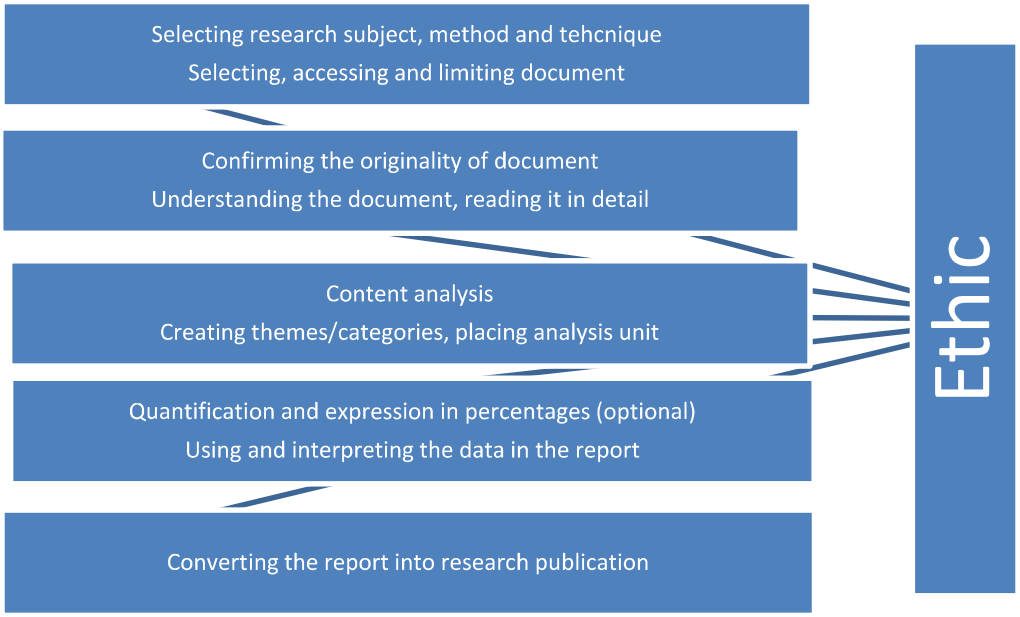

Figure 1. The Steps of Document Analysis

Source: Kıral, 2020.

As seen in Figure 1, the research process starts with the subject, method and technique selection. After deciding and reaching the documents to work with, it is time to limit the documents. Second step is confirming the originality of the document, reading the document in detail. Third step is analyzing the content. Fourth step is to use and interpret the data in the study and final step is to convert report into research publication.

Study Group

In order to explore the experiences of pre-service teachers about outdoor school learning, considering the limitations of outdoor activities, this study includes 28 undergraduate students with 14 males and 14 females studying at departments of Social studies education (n=10), Pre-school education (n=8), Turkish language education (n=6) and Primary school education (n=4). These participants have never been in any outdoor experience before as a part of course. Participants take this elective course "Outdoor School Learning Environments" in 2019 in Sinop University and they become voluntary for participating into this study. They are informed about the purpose and details of research and asked for their consent. Their permissions for using these data in research are taken verbally. The curriculum units within the scope of this course are designed by researcher with activities in a way which will allow participants to experience outdoor learning outside of their campus. Ideally, the time given for outdoor learning experiences are ranging from one-hour and four-hours depending on the distance of learning environment and limitation of the transportation. Participants are asked to make a general evaluation about their feelings related to outdoor learning experiences in the first week of course. In this way, it is aimed to reveal how participants perceive outdoor learning experiences before implementation. Also, they are informed about paying attention to how to write diaries in which they express

their ideas and feelings freely. They are informed that feeling comfortable while writing is important; but it is still important that others reading their diaries should understand properly what's meant. Especially, they are encouraged to answer such questions in their diaries: What locations can be outdoor school learning environments? What makes a location a learning environment? How do outdoor learning environments enhance learning? Do outdoor learning enhance learners' development? In the first week before implementation, researcher and participants have made a group discussion, and it is observed that they are a representative section of diverse views on outdoor school learning.

Table 1. Distribution of the Participations' Attitudes Towards Outdoor Learning in the Beginning (*N*=28)

	Curriculum	**Departments**				**Total**
		Social studies education	Pre-school education	Turkish language education	Primary school education	
Positive	The formal curriculum integrated with outdoor learning environments	7	4	2	1	14
Negative		2	2	2	3	9
Hesitants		1	2	2	-	5

Out of total, half of the pre-service teachers (n=14) are motivated about outdoor learning experiences; however, there are some participants (n=9) who have negative attitudes about outdoor learning. There are also participants who are uncertain about the effectiveness of outdoor learning, neither being against it. This is a very normal circumstance if considering their limited acquaintance with the outdoor school learning. Although outdoor school learning environments are highly emphasized by Ministry of Education 2023 Education Horizon in Turkey, there is a need to properly develop the curriculums of main courses for implementing outdoor learning-based program. 2023 education vision of Turkey supports teachers' developing competency to adapt their curriculum for including outdoor learning activities. In report of Turkey's Education Vision 2023 published by Turkish Ministry of Education (2018), under the title of Basic Education Goal 2, the importance of outdoor school learning environments is strongly emphasized in the following lines:

> "Cooperation will be strengthened between schools and scientific centers, museums, arts centers, techno-parks, and universities in their regions."
>
> "Greater focus will be placed on activities aimed at helping children discover the production capacity, culture, arts, and geographic characteristics of their own regions, along with learning about their region's plant and animal species, local foods, games, and folk dances. This will be both integrated into courses and added as extra-curricular activities." (Turkish Ministry of Education, 2018: 88)

Data Collection Tools

As data collection tools, this study uses pre-service teachers' reflective diaries about outdoor school learning experiences and researcher's observation notes. This course lasts fourteen weeks as a two-hour course. Eight weeks have been allocated for implementing outdoor learning activities, and pre-service teachers have at least five main outdoor school experiences. Participants have been assigned to write a reflective diary and write their reflective thoughts after each outdoor learning experience. Throughout the implementation, they continue to reflect their thoughts and at the end submit to the researcher as document. Also, another document is the researcher's observation notes during participants' outdoor learning experiences. For diaries, participants have been informed about how to keep a diary, and the following criteria has been assured since the beginning of implementation. Diaries will be kept with no missing activity, their thought should be written in context, and reflect their experiences in a critical way (Ersoy, 2015).

Data Analysis

Inductive data analysis has been used for analysis of qualitative data. This is a method of discovering patterns, themes and categories within the data through coding (Patton, 2014: 453). The analysis stages of Dey (1993) have been adopted in this study. The qualitative data has been in the first stage analyzed by researcher sentence by sentence, and codes have been created. Then, the categories have been composed based on the codes. Qualitative data and a code definition table are given to the second coder and data is re-coded. For reliability, the data have been checked and re-analyzed by this researcher who is experienced in qualitative research. Miles and Huberman's formula has been applied to the encodings of two researchers. In this study, the agreement between the researcher and second coder is found to be 0.86 for the personal development theme, .84 for the social development theme and .80 for the school-related development theme, which all indicate sufficient agreement, as the percentage of agreement should be over 80% for the reliability of the coding of the researchers (Miles & Huberman, 1994: 64). Also, in order to increase the internal validity, data analysis has been given with participant confirmation, direct quotation and distinction (including different views). In direct quotations, it is specified the descriptive information of participant. These efforts are made for increasing the reliability and validity of research.

Developing Curriculum

This study is carried out in elective course "Outdoor School Learning Environments". Outdoor school learning environments (OSLE) do have great potential for effective instruction as they increase an individual's self-awareness, respect for nature and help to be more attentive both physically and mentally. The educational potential of outdoor school learning provides the inspiration for this study. In the first stage, there are identified specific settings for outdoor school learning which will serve the learning purposes of curricular units in this course. Outdoor learning activities have been developed in order to serve learning purposes of the curricular units. For instance, outdoor learning activities have been developed by researcher for the following specific units:

"How to make a science cafe?", "Arboretums for learning activities", "Planetariums as a source of outdoor learning", "Museums to work with National Curriculum", "Newspaper press houses: Criticizing the reliability of data". To explain it in detail, the learning objective is created by researcher in unit of "How to make a science café": learners explore how discussion on current scientific issues in an informal and friendly coffeehouse encourages critical thinking among audience. A coffeehouse has been chosen by students and a guest scientist/academician has been invited who is associate professor in Educational Sciences for her speech about "forest schools as alternative pre-school education". Then, students have been asked to engage in discussion in this coffeehouse as outdoor school environment. Due to the nature of science cafes, discussions with the scientist took place in line with the interest of the learners, without over structuring. This study includes such outdoor school experiences developed for pre-service teachers enrolled in this elective course. The elementary criteria apply that outdoor school learning environments are at the core of each unit. This developed curriculum is built on a constructivist learning perspective. As claimed by Arends (1998), constructivist learning perspective argues that knowledge is created in the human mind, and the learner creates his own meaning through experience, which indicates that meaning is vulnerable to interaction of prior knowledge and emergent events. The principles of constructivist theory are compatible with outdoor school learning, which are listed as "learning is constructed, rather than passively absorbed, learning is an active process, all knowledge is socially constructed, all knowledge is personal, learning exists in the mind" (Driscoll, 2000; Fox, 2000; Vygotsky, 1978).

The outdoor school learning opportunities take place in a specific setting at a particular time based upon the learning objectives of units. Particular attention has been paid for that content is explored by learners through own experience, and social interaction. However, despite of all positive potential, Cotton and Cotton (2010) warn about the risks of "novelty space" in outdoor learning, which asserts that the novelty of being in an unfamiliar field environment can negatively affect student experience and learning and they emphasize the usefulness of enhanced pre-course preparation. They list four aspects of novelty space: geographical, cognitive, psychological and social. Cognitive novelty is about unfamiliar scientific names, concepts in a variety of context. It can be solved through the accessibility of lecturers on the field course. Secondly, geographical novelty is about learners' acquaintance with the outdoor location. Problems related to geographical novelty can be solved through beforehand pictures, videos, and maps. Thirdly, psychological novelty is about exposure to new events and their side-effects such as apprehension, tiredness, coldness and hunger. It can be solved through tutors' anticipating safety issues in advance and monitoring participants' potential health during outdoor learning experience. Lastly, social novelty is about the social opportunities some of learners finding it difficult "to adjust to being away from home and finding the social pressures stressful". This problem can be diminished through making close relationship with tutor and other group members, supporting them to producing work of a high quality. As seen in each risk, in order to promote the most positive experiences, these problems can be overcome with beforehand preparatory before the outdoor event takes place (Cotton & Cotton, 2009; Orion, 2007; Yunker, Orion & Lernau, 2011). In unit of "Arboretums for learning activities", potential unknown concepts such as herbarium, arboretum, plant flora etc. have been given to learners by researcher in order to reduce their

cognitive novelty. Pre-service teachers' visit to outdoor school learning environments take nearly three-to-four hours with prior knowledge about the task and learning setting, which will be informed about what kinds of task they need to do after outdoor learning experience. For instance, as part of arboretum activity, they experience creative drama activity in which the adventure of silkworm is told, and then "Discovery Garden" activity is conducted which aims to recognize the nature by first hand. All outdoor learning environments used in this study include planetarium, botanic garden, scientific coffeehouse, history museum and newspaper press house.

Outdoor School Learning Experiences

Outdoor learning experiences are more valuable if learners have the opportunity to follow their own interests. Therefore, outdoor learning environments should be meaningful for participants in order to support their learning. Indoor spaces do not have opportunities as effective as outdoor learning experiences. Participants in this study have carried out the following outdoor learning activities in a collaborative way related to the curriculum of the course.

1. Planetarium

Pre-service teachers are expected to involve in active observations and investigations about the basics of universe. The first outdoor school learning environment is planetarium. They are informed about planetariums around the world, get familiar with concepts related to the subject. They are informed about what kind of instructional activities can be carried out in planetariums. Then, pre-service teachers plan and make visit to Ondokuz Mayıs University planetarium as its location is two-hour distance from the students' campus. Pre-service teachers are informed by guide and instructor in this environment about planetarium, observation and basics of the universe. As an activity, they are asked to mark some stars, examine the pattern between the stars and design a constellation from their names. An example application for the constellation Ceren is as follows:

	A	B	C	..	E	....	J	N	...	R
A										
B										
C			*							
...										
E					* *					
L										
N								*		
R										*

Also, within the scope of the planetarium, word hunting activity is done which is followed by "who swallowed the Milky Way" story writing activity. At the end of outdoor learning experience, pre-service teachers have been asked to design their own planetarium and plan a learning activity for primary school students in planetarium. A sample planetarium and a learning activity designed by a participant is shown in Figure 2 and Figure 3:

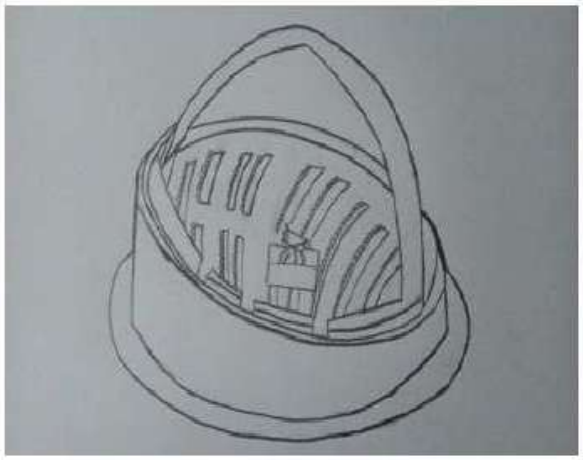

Figure 2: Talking Galaxies Designed by Participants

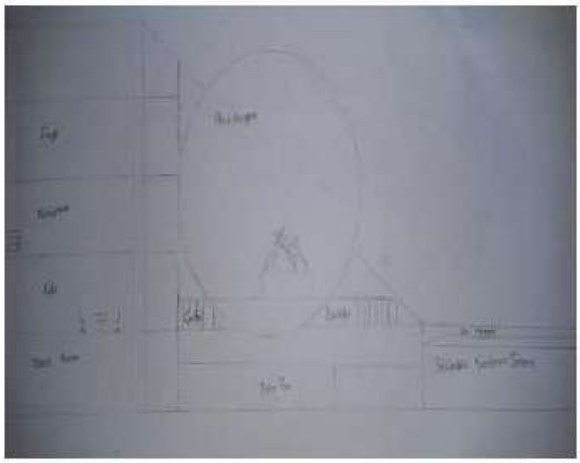

Figure 3. A Sample Design of Planetarium by Participants

Pre-service teachers then design a learning activity themselves for 7th graders which is given below as a sample:

Learning activity: Rhetoric and text types

Target: 7th Grade

Lesson: Turkish

Students (7th graders) are informed about concept of "rhetoric" beforehand. They are asked to collect information in the planetarium. After explaining the subject, we ask the students to talk about the planets, stars, and the galaxy, and to have them talk to each other as a narrator. We divide the students into 2 groups. We make one group "narrator group", another group "answering group". In narrator group, the students create sentences using rhetoric. Those in the answering group attempt to know which art of speech is used.

Post-lesson assessment activity: We want them to fill the gaps in the concept map distributed after the trip. In this way, we make the students think about the subject after the lesson, make sense of content during outdoor learning experience, reinforce their learning after the lesson and keep their mental process active.

2. History Museum

Museums are dynamic learning places with their own educational value by integrating what is learned at school and galleries they present. Pre-service teachers are expected to list how to use museums in order to promote a communicative, student-centered and experiential learning. They are informed about what types of museums exist around the world, get familiar with concepts related to the subject. They are informed about what kinds of instructional activities can be carried out in museums. Then, they plan and make visit to Sinop Archeology Museum as its location is half an hour distance from the students' campus. They also make contact with museum director to get information about a specific type of museum: "museum for kids". In the learning experience process, pre-service teachers are first given Search-Find papers by researcher and asked to find these objects on paper in the museum. Then, "let's call you …" activity is used in which participants give a new name those objects themselves and thanks to this activity, they develop a mental framework for overview of this museum. Then, a text related to that period is given to them, text analysis and discussion is made. At the end of outdoor learning experience, they have been asked to run an imaginary project named as "A kid is running in the museum" and design a learning activity. Also, they are asked to write role cards to be used as a learning activity in that specific museum for primary school students. A sample learning activity designed by pre-service teachers is given below:

Target: 4th Grade

Learning goals: Students pay attention to the object / situation / event. They observe the object or entities. They use their voice appropriately. They use language for communication.

Learning activity: A kid is running in the museum

The teacher takes kids to a museum for fun to learn. He asks the children to carefully observe what they see in the museum. They start the visit in the souvenir shop and take a few postcards showing information and museum's collection. Students are then asked to find what is in the postcard, around the museum. After completing the postcards, they are asked what is their favorite in that museum and explain their reasons to the artist of their favorite on the back of the postcard. The second activity is "mix them all". Students are given a blank paper divided into 6 squares. When they visit a painting, they are asked to copy a piece of that painting to their one square. After moving to next painting, they continue to copy and paint another square. At the end of outdoor learning experience, they have a work of art in their hand, mixing all arts displayed in the museum, and explain this work of art to their fans (group members).

A sample role card activity designed by pre-service teachers to be used in this museum is given below and Figure 4:

Learning activity: This activity is developed by pre-service teachers. They have prepared role cards based on real information about Sinop Archeology Museum.

Role card

Character: Sinope

Date: B.C. 756

Location: Rome

Reason for tension: Immigrants who want to establish a new city for themselves and female leader is eager to lead them.

Starting moment: Immigrants come to a place who will create the first foundations of the ancient city of Sinop and name this city SİNOPE. However, there is a female character very powerful and she wants to be the leader. Create a story using the two objects in the museum:

Figure 4. Role Card Figures for a Learning Activity in a Museum

3. Botanic Garden

The third outdoor school learning environment is a botanic garden. Botanic gardens are one of out-of-school learning environments which really encourages visitors for learning and understanding not just about plants but also about the earth, the environment of all living creatures. They are informed about how botanic gardens historically become a place of research, education and recreation for universities. Pre-service teachers are expected to involve in educational experiences in a botanic garden, illustrate the parts of a plant and identify how plants grow. Then, pre-service teachers plan and make visit to a botanic garden in Sinop as its location is half an-hour distance from the students' campus. In the botanic garden, pre-service teachers carry out "Discovery Garden" activity which aims to help them to recognize the nature by first hand, a nature awareness activity. Here, it is aimed to increase their awareness about basic concepts and terms related to botany. Pre-service teachers are asked to observe and record the life there by making a record activity and then discuss what they did recognize in this garden. Later, they make a creative drama activity in which the adventure of silkworm is told. At the end of outdoor learning experience, they have been asked to develop a plant identification tool which can be used in Science Education course for 7th graders. The best educational value of botanic gardens is that the

content is taught with living plants. Pre-service teachers develop a learning activity for primary school students in that place. A sample plant identification tool and its practice is shown below and Figure 5:

Learning activity: Let's guess the plant

Target: 7th Grade

Lesson: Science Teaching

Plant Identification Tool

Blossom	X	X	X
No blossom			
Capable of creating fruits and seeds	X	X	X
No capable of creating fruits and seeds			
Sporiferous vesicle			
Acerate leaf			
No real root, plant or leaf			
Coniferous leaf			
Simple leaf			X
Compound leaf		X	
Lobed leaf	X		X
Monocot	X		X
Dicotyledon		X	
Seeds inside the fruit		X	

A:Narcissus B : Tomato plant C: Saffron

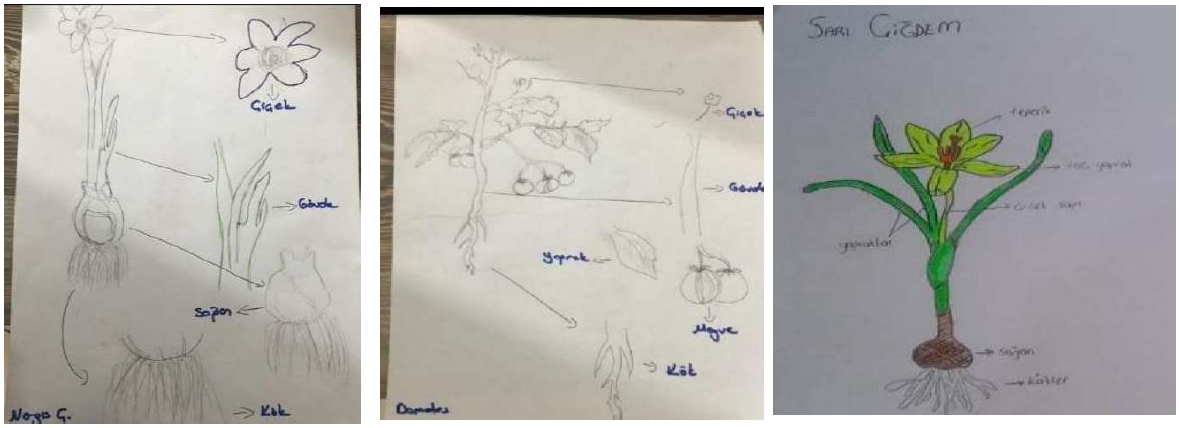

Figure 5: Plant Identification Tool Designed by Pre-service Teachers

4. Science CoffeeHouse or Café Scientifique

The first science cafe was Café Scientifique in United Kingdom where people can explore the current developments and ideas in science, most of the time for the price of a cup of coffee (Dallas, 2006). Science cafes are outside of traditional learning settings as they are not lecture-style just like in classes or conferences. Any place such as coffeehouse, restaurant, theatre can be a science cafe when a science issue is discussed by a group of people with a field expert in a calm atmosphere, accompanied by a cup of coffee. Science cafes encourage people's interest in understanding and learning scientific issues. Pre-service teachers are informed about what makes a typical coffeehouse a science cafe and what are the samples of science cafe in Turkey and around the world. Then, they have been asked to make a science cafe in a location they decide which is distant from their campus. It is thought that a science coffeehouse is more effective when it is organized in line with the interests and decisions of the learners and when participants feel that they have some experiences for contributing to topic; therefore, this science coffeehouse is organized about forest schools, which is a popular topic at that time. As a subject, the purpose of forest schools, their curriculum, teacher-child-parent relationship there is discussed. Pre-service teachers have invited an associate professor in area of educational sciences to get information about a specific subject related to forest schools as alternative pre-school education. Guest scientist's speech takes approximately 35-40 minutes, it is followed by participants' questions and discussions approximately 10-15 minutes. In this activity, it is aimed to help pre-service teachers realize how this outdoor school learning environment supports critical thinking, discussion skills and active participation. At the end of outdoor learning experience, pre-service teachers have been asked to write a diary for reflecting their thoughts about science cafes. There is given no figure in this activity due to confidentiality of participants.

5. A local newspaper press house

The last outdoor school learning environment has been a local newspaper press house. This outdoor environment is so valuable when learning purpose is about thinking critically and in a reflective way. Pre-service teachers are expected to criticize the reliability and accuracy of information in news. They are informed about checking what they read before making a judgement. McGuinness, Eakin, Curry and Sheehy (2006) claim that for teaching critical thinking, the following skills should be developed: checking the source of data, explaining the reason, predicting, and generalizing skills. Newspaper press houses are the best outdoor learning environment from this standpoint. Participants and researcher plan and make a visit to a local newspaper house which is half-an hour distant from their campus. They contact editor to get information about the examples showing how misleading, incorrect news take place in newspapers all around the world and how to recognize biased texts. Then, they choose some short news that they find interesting and accurate, and write it again by making a few changes. They exchange the new text with group members and see if participants who did not see original text can recognize what is misleading there. At the end of outdoor learning experience, they have been asked to write a diary for reflecting their thoughts about this outdoor learning experience.

FINDINGS (RESULTS)

At the end of implementation, researcher and pre-service teachers make a group discussion and evaluate this process. It is seen that the majority of participants (n=25) have evaluated outdoor school learning positively at the end of implementation, while there are still few hesitators (n=3) who strictly think the necessity of a good design for effectiveness of outdoor learning and it is time-consuming and demanding. The difference between in-class learning and outdoor school learning is clearly noticed by participants, as explained by them how such authentic learning experiences influence learning process and its permanence. In general, outdoor learning experiences are adopted by participants who are actually willing and ready to engage in natural places around them. For identifying what places/spaces can be regarded as outdoor school learning environments, participants specified very accurate and sensible places for outdoor learning. From perspectives of pre-service teachers, outdoor school learning environments are -from most frequently referred to the least- museums (n=21), science centers (n=20), national parks (n=18), art galleries and artists' studios (n=18), planetariums (n=15), botanic gardens (n=12), historical places such as madrasah, castle (n=11), business places such as industry, media (n=10), and lastly nature itself is an outdoor learning environment (n=10). Samples from pre-service teachers' diaries are given below:

> *Museum:* "Even though outdoor activities are a bit demanding, it reinforces learning. Especially museums are very useful for learning activities. I like doing things in museums. I really remember what note I take in museum." (A2, Female, Turkish Education)

> *Science Center:* "I am not someone who is interested in outdoor environments for lessons. Whether these environments are useful or not. However, even me, it is so exciting and catchy to be in a science museum to learn! I am more deeply interested in some specific outdoor learning settings such as science centers." (A17, Male, Social Studies Education)

> *National Park:* "Academic success is not everything. We should also focus on responsibility for the environment. For instance, Turkey is rich in terms of national parks. We should use them for our lessons." (A9, Female, Pre-school Education)

> *Art Gallery:* "There are many outdoor environments. Art galleries come to my mind first. Big cities are more lucky for that. These galleries give many benefits to teachers because students experiencing this kind of environments interact more, explore more and learn more." (A1, Female, Primary Education)

> *Planetarium:* "Planetariums are good examples. They can be resources for creating a good learning atmosphere. They are important for improving students' school achievement." (A21, Male, Primary Education)

Pre-service teachers mostly put emphasis on the fact that outdoor school learning environment should be exciting, catchy, and include rich learning while engaging several senses. From the perspectives of pre-service

teachers, some learning activities can be more favorably and frequently carried out in outdoor school learning environments. These learning activities outside classroom are revealed as: making experiments (n=20), exploration tasks (n=17), creativity tasks (n=17), "imagination tasks (n=16)", "collaborative tasks (n=16)" and "observation tasks (n=14)", "reflection tasks" (n=12). It is evident that tasks which include making experiments, tasks who require students to explore some ideas, or events in nature, and tasks which encourage the creativity are very convenient for outdoor learning. However, pre-service teachers have also emphasized certain factors which facilitate or pose a risk in terms of outdoor school learning. From their view, the most facilitating factors are teachers' level of professionalism about outdoor learning (n=17), students' physical and emotional well-being in the learning environment (n=15), organizational support (n=14) and the distance of outdoor learning environment (n=13). Participants regard the professionalism of teacher as the most important factor which facilitates outdoor learning experiences. Teacher professionalism is about how well-educated in order to lead in such environments and willingness about outdoor learning. Secondly, it comes students' well-being in outdoor learning experiences. This well-being includes both emotional and health well-being. Even organization support comes after students' well-being. Participants rate the distance of outdoor learning space as the least important.

Pre-service teachers also write their reflective thoughts which indicate the effectiveness of outdoor school learning environments and the data analysis shows that there are seventeen codes under three themes about outdoor learning. These themes include personal development, social development and school-related development. It is found out that school-related development theme includes real-life learning experiences (f=20), school adjustment (f=20), flexible learning/curriculum (f=19), active commitment (f=19), course adaptability (f=18), attention to the content (f=17), critical thinking (f=15) and contextualized learning (f=14). Secondly, social development theme includes respect for environment (f=19), connectedness (f=17), social interaction (f=17), sense of social responsibility (f=15), outdoor leadership (f=13); and lastly personal development theme includes curiosity (f=18), greater sense of confidence (f=17), autonomy (f=16) and motivation (f=16). Additionally, the data shows that the most frequently appearing benefits of outdoor learning include real-life learning experiences, flexible learning/curriculum, school adjustment, curiosity and respect for environment. Based on the views of pre-service teachers, there has been developed a framework which illustrates the features of outdoor school learning, which is shown in Figure 6:

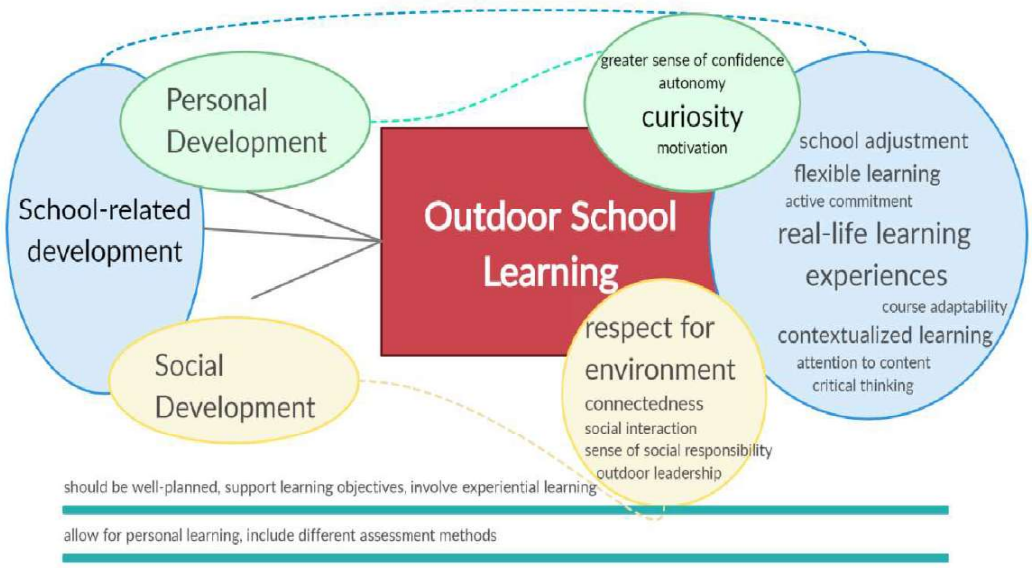

Figure 6. Outdoor School Learning Framework

DISCUSSION

The findings of this study support the use of outdoor school environments as a part of formal curriculum which enhance three areas of development including school-related development, social development and personal development. In this study, the significance of outdoor school learning is evidenced by views of participants experiencing outdoor school learning; therefore, it is advised that curriculum developers should include outdoor school learning programs and courses within the K-12 and higher education systems. Despite some points to consider in outdoor school learning, these environments have the potential to serve as authentic places for achieving goals of education system.

When the findings of this study are examined, pre-service teachers emphasize experiential learning, allowing personal learning, and prioritizing learning objectives in outdoor learning experiences. They also emphasize that outdoor school learning is based on flexible learning and real-life learning, encouraging active participation and facilitating content focus. According to Priest (2010), outdoor education has its own qualities and features. First of all, it is a method for learning. Afterwards, it takes place primarily in the outdoors, requires use of all senses and domains, experiential, based upon interdisciplinary curriculum matter, and lastly a matter of relationships involving people and natural resources. As seen in this explanation, outdoor education by nature allows for a more personal, experiential and customized learning. Dillon, Rickinson, Teamey, Morris, Choi, Sanders and Benefield (2006) imply the significance of carefully designed learning activities and assessment of students' outdoor learning. Outdoor learning should be designed with more care than in-class activities and assessment part is similarly crucial in outdoor learning. However, Ballantyne and Packer (2002, p. 228) draw attention to a risk in outdoor education which is over-structuring learning activities. This is against the spirit of outdoor learning. They also note that the use of worksheets, note-taking and reports are all unpopular with students, and fail to

contribute greatly to environmental learning. It is also revealed in other studies that activities in outdoor school learning environments allow first-hand experiences and establishing relationships with real life (Bozdoğan & Kavcı, 2016; Ertaş, Şen & Parmaksızoğlu, 2011). Acar (2013) also emphasizes the importance of direct experiences and the use of natural materials when designing outdoor school learning environments. Acar (2013) also stresses the importance of direct experience and use of natural materials while designing outdoor natural environments. Acar (2013) claims that it is crucial to use natural materials, artificial materials, but they should also be functional for learners' use, for instance outdoor learning should offer direct experience opportunities. Behrendt and Franklin (2014) refer to the importance of science field trips as educational tools to connect students to classroom concepts. Experiential learning at formal and informal field trip venues increases student interest, knowledge, and motivation.

When the findings of this study are examined, it is seen that the purpose, context, and activities in formal curriculum necessitate the use of outdoor school learning environments which are suitable for the actualization of learning objectives in the formal education program. It is found out that pre-service teachers are more familiar with museums, science centers, national parks and art galleries; however, they also consider other environments as significant such as planetariums, botanic gardens, historical places such as madrasah and castle, business places such as industry and media, and lastly the nature itself. Similarly, in the research findings of Kubat (2018), pre-service science teachers mostly consider science centers and science museums as outdoor school learning environments; however, they consider zoos and planetariums very low. In the study of Topçu (2017), it is found out that museums and historical places are mostly seen as outdoor school learning environments, while national parks, school gardens, public institutions and organizations are less preferred as outdoor school learning environments. In study of Dyment (2005), it is referred to the necessity of mandating curriculum links in order to support teachers to take students outside, for instance in science. In study of Dyment (2005), participating teachers think that "This is math time, I can't go outside" or "no see the benefits of it". There is a need for teachers to realize that science is not the only subject area for outdoor school learning, actually there are "probably 3000 places in that elementary curriculum that we could be out there doing stuff". However, teachers need to realize that there is no single subject area for outdoor school learning, however, it is seen that some subjects such as language lessons, mathematics and geography are rarely taught in these settings (Dyment, 2005). In Karadoğan's (2016) study, examples of outdoor school learning environments and out-of-classroom practices are given. Some outdoor school learning environments are listed with a wide range of activities that will complement the formal curriculum, especially in nature sciences, as follows: trip-observation and fieldwork, social, cultural, industrial & scientific places (museums, natural history museums, science and technology museums, planetariums, arboretums, botanical gardens, zoos, meteorological station), virtual reality applications, nature education, environmental club activities, social and cultural & scientific programs (exhibitions, meetings, congresses, panels, conferences and symposiums), spatial arrangements for lifelong learning and self-learning environments. In study of Ertaş Kılıç and Şen (2014), energy park, Feza Gürsey Science Center and a technology museum are preferred as outdoor school learning environments. In Yıldırım's (2020)

study, nature, botanical gardens, science fairs, science museums, history museums, observatories, anatomy exhibitions and energy parks are among the preferred outdoor school learning environments within the scope of science education course. Although it is not right to limit outdoor school learning environments to certain specific places, when the studies in literature are examined, it is observed that some specific outdoor learning environments are preferred more such as aquariums (Falk & Adelman, 2003; Rahm & Ash, 2008;), museums and science centers (Aktekin, 2008; Sturm & Bogner, 2010), zoos (Gupta, Fraser, Rank, Brucker & Flinner, 2019; Yavuz, 2012), energy parks (Balkan Krier & Atabek Yiğit, 2010; Ertaş, Şen & Parmasızoğlu, 2011), botanical gardens (Sanders, Ryken & Stewart, 2018 ; Wiegand, Kubisch, & Heyne, 2013), national parks (Glaab & Heyne, 2020; Güler, 2009) and planetariums (Özcan & Yılmaz, 2018).

The findings of this study indicate that outdoor school learning experiences support academic development as well as personal and social development. Outdoor learning experiences seem to increase school adjustment, encourage active commitment, increase attention to the content, support critical thinking, real-life learning experiences and flexible learning. Nicol (2003) discusses whether outdoor education is a research topic or a universal value by claiming that the body of outdoor education literature puts more significance to learning outcomes relating to personal and social aspects than education. Likewise, the findings of this research indicate that outdoor school learning provides social aspects including respect for environment, connectedness among learners, social interaction, sense of social responsibility, and (outdoor) leadership. Also, in terms of personal development, outdoor school learning facilitates greater sense of confidence, autonomy, motivation and curiosity. However, this study also indicates school-related development aspect of outdoor learning. Related to academic achievement, Pfouts and Schultzs (2003) focus on benefits of school-based outdoor learning centers which aim to support young gifted learners. They claim that some schools create small projects such as butterfly gardens, bird feeders, native plant gardens, compost piles; some schools create large projects such as wetlands, ponds, nature trails which aim greater ecological and educational purposes. According to them, developing appropriate curriculum for young gifted learners is difficult, they understand content in traditional classroom but don't focus on content in a deep and comprehensive way; therefore, experiencing outdoor learning is enriching for young gifted learners who have little challenging in traditional classroom. Crowder (2010) in dissertation thesis study with 14 at-risk of failing high school students and aims to explore the effectiveness of outdoor learning on engagement in English, biology, algebra and geometry. This is a good indicative of outdoor learning experiences' influences on core academic content. In findings of Crowder's dissertation, it comes out that if experiential learning environments are implemented at high quality, these experiences support students' academic, behavioral and social engagements and these at-risk students understand core concepts better when they engage with hands-on learning experiences in flexible outdoor environments. Still, it is emphasized how quality and a good design is important in outdoor learning activities. Likewise, Beames, Higgins and Nicol (2011) imply how outdoor learning allows for interdisciplinary curriculum design. According to them, outdoor learning integrates curricular content which is often traditionally taught separate subject areas such as geography, literature, ecology, history. There is a clear relationship between outdoor experiences and specific subject areas;

however, outdoor has greater potential of integrating curricular content with broader skill developments. Beames et al. (2011) suggest that primary-school context is more appropriate for integration of outdoor learning into teaching practices, while secondary-school context allows for lower chance of interdisciplinarity due to schedule and other pressures. In this respect, outdoor learning in secondary school context is more appropriate for subject-specific usage of outdoor learning. Christie and Higgins (2012) argue that better achievement at school and enhancing personal and social development are evidences of outdoor experiential learning environments. Likewise, Çiçek Şentürk and Saraç (2017) study with science teachers and state that activities in outdoor school learning environments allow the application of the knowledge learned in science courses. These environments also contribute to educating science-literate individuals and serve as an environment suitable for individual differences.

The findings of this study imply that in terms of learning activities, outdoor learning environments are suitable for purpose of making experiments, exploration tasks, creativity tasks, imagination tasks, collaborative tasks and observation tasks. Cooper (2015) expresses that there are many benefits of natural outdoor learning environments such as improving self-regulation, advancing physical fitness and gross motor development, improving nutrition and concentration, promoting cognitive development, academic performance and self-confidence. Similarly, Topçu (2017) finds out that outdoor school learning improves learning by experiencing, remembering, multiple perspectives, and supports the interaction between people and the environment. Outdoor school learning experiences are also found to be effective in the preschool period (Civelek & Özyılmaz Akamca, 2018; Yıldırım & Özyılmaz Akamca, 2017). Yıldırım and Özyılmaz Akamca (2017) revealed that as a result of ten-week experiences of outdoor school learning, 6-year-old children in experimental group showed significantly more development in cognitive, linguistic, socio-emotional and motor skills compared to those in the control group. These skills are among the learning objectives of the Pre-school Education Curriculum of the Turkish Ministry of Education. Similarly, in the research findings of Weinstein, Przybylski, and Ryan (2009), it is revealed that learning experiences outside the school reduce stress and support emotional and social development in children. Yıldırım and Özyılmaz Akamca (2017) express that outdoor school environments offer students the opportunity to practice and experience, and allow to interact directly with the content they learn. The responsibility of teachers is to support learners' skills to access information instead of direct transfer of information, to design an educational environment in which learners' curiosity is satisfied, ideas are freely expressed and cause-effect relationships are established. James and Williams (2017) remark that middle school students, teachers and pre-service teachers feel the need of support of school-based experiential outdoor education. They note that there are benefits of engaging middle school learners in memorably relevant learning, immersing them in physically active, field-based education, and providing them with authentic, contextualized opportunities to extend classroom-based learning. Therefore, school-based experiential outdoor education is unarguably a necessity; however, it is frequently ignored as a part of the curriculum in current era of education which is basically high-stakes test-based (James & Williams, 2017). Sahrakhiz, Harring and Witte (2018) study on learning opportunities in outdoor school experiences in Germany from the children's perspective. They focus on

learning potential of the outdoor school experiences in terms of children activities such as playing, moving and social cooperation. Their study reveals that the outdoor school as a place of teaching, play, exploration and experience offers formal and informal learning opportunities. Also, outdoor school experiences encourage children for a better engagement among themselves and with their social surroundings by challenging them physically, cognitively, perceptually and socially. The success of the outdoor school's potential depends on well-balanced combination of teacher-structured and informal learning processes. Avan, Gülgün, Yılmaz and Doğanay (2019) carry out a STEM study in outdoor learning environments with voluntary forty-five 7th and 8th graders and find out that participatory students show progress in scientific process skills, interest in astronomy, critical thinking and problem-solving skills.

In this study, pre-service teachers in this research have also emphasized certain factors which facilitate or pose a risk in terms of outdoor school learning. From their view, the most important factors are teachers' level of professionalism about outdoor learning, students' physical and emotional well-being in the learning environment, organizational support and the distance of outdoor learning environment. In study of Dillon et al. (2006), certain factors that affect how much learning takes place outdoors include fear and concern about health and safety, teachers' lack of confidence in teaching outdoors, school curriculum requirements, shortages of time, resources and support. Similarly, Ernst and Tornabene (2012) find out that the strongest predictors of using natural outdoor settings are perceived difficulty in using these outdoor settings, participants' level of nature relatedness, and understanding the significance of nature for learners' development. However, there are some obstacles which prevent effective use of outdoor environments which include safety concerns and perceived lack of access to natural settings. Integration of outdoor learning with formal school experiences requires more time and effort compared to in-class teaching. In order to go beyond class trip and achieve an effective instruction, outdoor experiences should be associated with curriculum content with learner-centered and instructional objectives-based activities.

CONCLUSION

This study designs outdoor school experiences for pre-service teachers who participate in elective course in education faculty. Findings indicate that effectiveness of outdoor learning depends on a well-designed plan. Also, outdoor school learning environments should be exciting, catchy, and include rich learning while engaging several senses. Pre-service teachers are more familiar with certain outdoor school learning environments such as museums, science centers, national parks, art galleries and artists' studios while less familiar with planetariums, botanic gardens, historical places, business places such as industry, media, and lastly nature itself. Findings also indicate that some learning activities are more suitable to be carried out in outdoor learning such as making experiments, exploration tasks, creativity tasks, imagination tasks, collaborative tasks, observation tasks and reflection tasks. However, pre-service teachers note that teachers' level of professionalism about outdoor learning, students' physical and emotional well-being in the learning environment, organizational support and the distance of outdoor learning environment determine the difficulties when implementing

outdoor learning experiences. After standards of quality in outdoor learning are met, it is clear that outdoor learning has positive outcomes in three domains: personal, social and school-related development. It is found out that school-related domain includes school adjustment, flexible learning/curriculum, active commitment, course adaptability, attention to the content, critical thinking, real-life learning experiences, contextualized learning. Secondly, social development domain includes respect for environment, connectedness, social interaction, sense of social responsibility, outdoor leadership; and lastly personal development domain includes greater sense of confidence, autonomy, motivation, curiosity. Additionally, the data shows that the most frequently appearing benefits of outdoor learning include real-life learning experiences, flexible learning/curriculum, school adjustment, curiosity, and respect for environment. To sum up, this study develops a framework for outdoor school learning and displays certain learning designs in outdoor school environments as part of formal curriculum. These outdoor experiences of pre-service teachers provide opportunities for them to engage in first-hand interaction with outdoor learning which have a low chance of actualization in a classroom setting.

RECOMMENDATIONS

In line with the obtained results, it is suggested that schools should utilize the resources of society, rather than just stick to its own resources. This will encourage learners to follow their own learning style and learning pace which is a good start to expand their content knowledge. While keeping in mind the concerns of administrators, teachers and students, outdoor school learning should be a part of formal curriculum in order to go beyond the limitations of in-class teaching and achieve educational objectives. According to the result of this research, the following suggestions can be made for future research about instructional design of specific outdoor learning environments. Also, the effectiveness of outdoor learning can be assessed with different age groups related to curriculum. There can be conducted research on different assessment and evaluation methods in outdoor environments. Lastly, there can be conducted experimental studies about effectiveness of place-based education and forest kindergartens.

- Studies can be conducted for purpose of creating principles and guidelines regarding the process of integrating out-of-school learning environments into the official curriculum.
- In terms of learning activities, it is recommended to use out-of-school learning environments for experiments, exploration activities, creativity activities, imaginative activities, collaborative activities and observation tasks.
- Outdoor school learning can take place as a part of curriculum development studies in primary, secondary and higher education.
- The effectiveness of out-of-school learning included in the curriculum can be measured and evaluated including different age groups.

- Studies can be conducted on how different measurement and evaluation methods can be utilized during and after outdoor school learning experiences.

Finally, empirical studies can be conducted on authentic environments' effect on academic development such as location-based education and forest kindergartens as outdoor school learning environments.

ETHIC TEXT

This article conforms to author guidelines, publication guidelines, research and publication ethics and journal ethical rules. The responsibility belongs to the author for any violations that may arise regarding the article.

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OKUL DIŞI ÖĞRENMENİN RESMİ ÖĞRETİM PROGRAMIYLA BÜTÜNLEŞTİRİLMESİ: OKUL DIŞI ÖĞRENME DENEYİMLERİ TASARLAMAK VE ÖĞRETMEN ADAYLARI İÇİN OKUL DIŞI ÖĞRENME ÇERÇEVESİ GELİŞTİRMEK

ÖZ

Bu çalışma, ders programındaki öğrenme hedeflerine ulaşmak için motivasyon sağlama amaçlı öğretim programına entegre edilmiş okul dışı öğrenme deneyimleri tasarlamaya odaklanmaktadır. Bu çalışma kapsamında öğretmen adayları, seçmeli derslerinin formal öğretim programının bir parçası olarak okul dışında öğrenmeyi deneyimlemişlerdir. Okul dışı öğrenme etkinlikleri tasarladıktan ve deneyimlendikten sonra, okul dışı öğrenme hakkında öğretmen adaylarının algıları incelenmiştir. Bu öğrenme biçimin doğası göz önüne alınarak Sosyal bilgiler eğitimi (n=10), Okul öncesi eğitimi (n=8), Türkçe eğitimi (n=6) ve Sınıf eğitimi (n=4) alanından öğretmen adaylarıyla çalışılmıştır. Bu çalışma, araştırma yöntemi olarak doküman analizini kullanmıştır. Araştırmacının gözlem notları ve öğretmen adaylarının yazdıkları yansıtıcı günlükler veri toplama araçları olarak kullanılmıştır. Verilerin analizi, öğretmen adaylarının bir dersin programını okul dışı öğrenme deneyimleri katarak tasarlamayı büyük bir ilgiyle desteklediklerini göstermektedir. Bu ortamlarda yapılacak en uygun öğrenme etkinlikleri deney yapma, keşif etkinlikleri, yaratıcılık etkinlikleri, hayal gücü etkinlikleri, iş birliğine dayalı etkinlikler, gözlem etkinlikleri, yansıtma etkinlikleri olarak sıralamışlardır. Ayrıca okul dışı öğrenme ortamları olarak müzeler, bilim merkezleri, milli parklar, sanat galerileri ve sanatçı stüdyoları, planetaryumlar, botanik bahçeleri, medrese ve kale gibi tarihi yerler, iş yerleri - sanayi ve medya dahil, ve doğanın kendisi belirtilmiştir. Okul dışında öğrenmeyi kolaylaştıran en önemli faktörler olarak öğretmenlerin profesyonellik düzeyi ile öğrencilerin öğrenme ortamındaki rahatlığı belirtilmiştir. Ayrıca, bulgular, okul dışı öğrenmenin üç alan açısından etkili olduğunu göstermektedir: Kişisel gelişim alanı (daha fazla güven duygusu, özerklik, motivasyon ve merak); sosyal gelişim alanı (çevreye saygı, bağlılık, sosyal etkileşim, sosyal sorumluluk duygusu, dış mekan liderliği); ve son olarak okulla ilgili gelişim alanı (okula uyum, esnek öğrenme/esnek program, aktif katılım, derse uyum, içeriğe odaklanma, eleştirel düşünme, gerçek yaşama dayalı öğrenme deneyimleri).

Anahtar Kelimeler: Okul dışı öğrenme ortamları, deneyimsel öğrenme, sınıf dışında eğitim, okul dışı öğrenmenin öğretim programına entegre edilmesi.

GİRİŞ

Dünyadaki pek çok ülkenin eğitim sisteminde, okul öncesi, ilköğretim, ortaöğretim ve yükseköğretimde resmi eğitim programları dahilinde okul dışı öğrenme etkinliklerini desteklemeye yönelik yükselen bir eğilim olduğu görülmektedir. Sınıfta öğrenme, gerçek hayatın içinde gözlemleyerek ve deneyimleyerek öğrenmeye imkân tanıyan okul dışında öğrenmeyi de içermeye başlamıştır. Dış ortamların ve doğanın her yaştan öğrenci için büyük bir potansiyele sahip olduğu fark edilmektedir. Bu nedenle, eğiticilere yönelik okul dışı öğrenmelerde hem bireysel hem de grup öğrenme görevlerini, etkin öğrenme etkinliklerini ve deneyimsel uygulamaları nasıl tasarlayacaklarına rehberlik eden kurslarda artış olduğu görülmektedir. Rillo'nun (1980) belirttiği gibi, Johann Amos Comenius, Jean Jacques Rousseau, Pestalozzi ve Froebel gibi ilk dönem eğitimcileri doğanın, açık havanın kullanımına zaten vurgu yapmışlardı, ancak okul dışı öğrenme aslında çok daha erken, insanın dış mekân deneyimlerine adapte olmasından sonra açık havada gerçekleşmiş ilk öğretme-öğrenme eylemiyle başlamıştır. Rillo'ya (1980) göre, ne yazık ki, böylesine iyi bir başlangıçtan sonra, eğitim sistemi ve program geliştirmeciler birçok ülkede -okul dışı öğrenmelerin nispeten zayıf varlığıyla da gözlemlenebildiği gibi- okul dışında öğrenme kavramını ihmal etmişlerdir. Rillo (1985, s.7) okul dışında öğrenmeyi "herhangi bir konu alanında, herhangi bir sınıf düzeyinde, en iyi biçimde sınıfın dışında öğrenilebilecek, müfredata dahil edilen tüm öğrenmeler" olarak açıklamaktadır. Sınıf dışı ortamlarda öğrenmeyi başarıyla gerçekleştirmek ilk bakışta göründüğü kadar kolay değildir, çünkü okul dışı öğrenmeleri resmi eğitim programına entegre etmek normal sınıf içi faaliyetler düzenlemekten daha fazla çaba ve zaman gerektirir. Okul dışı öğrenme; açık havada eğitim, deneyimsel öğrenme, rekreasyonel öğrenme, orman okulları, doğa eğitimi ve okulun dışında öğrenme gibi birçok konuyu kapsayan geniş bir terimdir. Donaldson ve Goering'e (1970) göre okul dışı öğrenme daha önceki bazı iyi niyetli ancak yetersiz girişimlere rağmen modern anlamda Amerika Birleşik Devletleri'nde "İkinci Dünya Savaşı sonrası" ortaya çıkan bir fenomendir. Bu süreçteki önemli bir olay, 1965 yılında eğitimcilerin okul dışı öğrenme kavramı altında faaliyetler gerçekleştirmesine izin veren İlk ve Orta Öğretim Yasası'nın Amerika Birleşik Devletleri'nde yürürlüğe girmesidir (Paul, 2016). Phyllis (1986), eğitim kurumları, eyalet ve yerel hükümet kurumları ve özel kurumların okul dışı öğrenme programlarını desteklemesine rağmen, okul dışında öğrenmenin ulusal olarak standartlaştırılmış bir müfredata veya yeterlilik ölçülerine sahip olmadığına dikkat çekmektedir. Phyllis, okul dışı öğrenmeyi "dış dünyada öğrenme, dış dünya hakkında öğrenme, dış dünya için öğrenme" olarak tanımlamaktadır. Bu tanım, öğrenmenin nerede gerçekleşeceği (herhangi bir açık hava ortamında), öğretilecek konu (çevre, doğa ile ilgili yönler) ve faaliyetin amacı (bilgi, beceri veya tutum geliştirme) gibi belirli yönleri açıklığa kavuşturmaktadır. Onun açıklamalarında, okul dışı öğrenmenin organize edilmiş açık havada öğrenmeye atıfta bulunan geniş bir terim olduğu iddia edilebilir (Asfeldt, Purc-Stephenson, Rawleigh & Thackeray, 2020). Okul dışında öğrenme, her şeyden önce bir eğitim bağlamıdır, sonrasında ise ilk elden deneyimler ve otantik etkinliklerle öğrenmeye izin veren okulun dışında bir mekân olarak tanımlanmaktadır. Öğrenme ve Öğretme 2010 Raporu, okul dışı öğrenmenin anlamlı ve ilişkisel öğrenmeye izin veren, deneyimsel olarak bağlantılar kurmayı teşvik eden, müfredatın kendisini zenginleştirirken müfredat alanlarında bireylerde daha derin bir anlayışa yol açan bir eğitim bağlamı olduğunu açıklamaktadır. Bu rapor okul temelli okul dışı öğrenme ile bu ortamların

müfredata entegre edilerek ilerlemeci bir okul dışı öğrenme deneyimlerine yönelik vizyon sunduğu için oldukça önemlidir. Bu rapor, okul dışı öğrenmeyi okul bahçeleriyle, yerel ormanları ziyaret etmeyle, keşif yapmayla, yerel toplulukla ilişki kurmakla ve bir okul seyahat planı geliştirmekle örneklendirmektedir (Brown, 2010). Crim, Desjean-Perrotta ve Moseley (2008), dış mekân ortamlarının her müfredat alanında, özellikle erken çocukluk eğitiminde ölçülemez öğrenme olanakları içerdiğini, ancak erken çocukluk eğitimcilerinin pedagoji ile okul dışında öğrenme deneyimleri arasındaki bağlantıyı gözden kaçırmış olabileceğinin altını çizmektedirler. Onlara göre, erken çocuk eğitimcileri çocukken doğal dış mekân ortamlarındaki deneyimlerden yoksun olabileceğinden, dolayısıyla okul dışı öğrenimdeki bu öğrenme olanaklarına karşı ilgisiz olabilecekleri ifade edilmiştir. Bununla birlikte, Elliott'un (2010) ima ettiği gibi, sosyo-kültürel gelişim kuramları, erken yaştaki çocukların çevrede aktif fiziksel katılım yoluyla öğrendiklerini ortaya koymaktadır. Elliott (2010), açık hava ile teması sağlık ve iyi hal için aynı gündelik yemek ve uyku kadar önemli görmektedir. Bu durum, açık havada öğrenmenin sağladığı faydalara işaret etmekte ve öğretmen yetiştirme programlarının, okul dışı öğrenmeyi müfredata entegre etme konusunda hevesli öğretmenleri okul dışı öğrenme konusunda eğitmesini gerektirmektedir.

Sjöblom ve Svens (2018), doğada eğitim veren okullarının doğal ortamlarda dersler için programlar sunduğunu belirtip Fin doğa okullarını buna iyi bir örnek olarak vermektedir. Sjöblom ve Svens (2018) bu okulların birincil önemini, çeşitli konular kapsamında ulusal müfredatın amaçlarına doğada eğitimle katkıda bulunmak olarak ifade etmektedir. Sjöblom ve Svens'in (2018) yürüttüğü bu araştırmaya katılan 10-11 yaşındaki öğrenciler, doğa okulu öğreniminin bilişsel, duyuşsal, sosyal ve pratik becerileri desteklediğini ifade etmektedirler. Sjöblom ve Svens (2018) öğrencilerin okul dışında gerçekleşen öğrenmelere ilişkin farkındalıklarını artırmak için öğrenme üzerine düşünmenin önemini vurgulamaktadır. Aynı şekilde, Harun ve Salamuddin (2013) okul dışı öğrenme kavramının yeni olması ve risk oranının yüksek olabilmesi nedeniyle potansiyelinin tanınmamasına rağmen, okul dışı öğrenmenin 21. yüzyıl eğitim sistemine çok uygun olduğunu ileri sürmektedir; çünkü üç öğrenme alanıyla ilgilenmektedir: psikomotor alan, bilişsel alan ve duyuşsal alanlar. Okul dışı öğrenmenin önemini ve faydalarını "bireylerin potansiyelini, bilgisini genişletmek, öğrencilerin entelektüel yeteneklerini geliştirmek ve keskinleştirmek" olarak listelemektedirler. Sınıf içi öğretimde teori ve kavramlara odaklanılırken, okul dışı öğrenmede öğrencilerin yeteneklerini ve potansiyellerini geliştirmeye odaklanıldığına dikkat çekmektedir.

Türk eğitim sistemi söz konusu olduğunda, okul dışı öğrenme -özellikle doğa eğitimi- son yıllarda önem kazanmakta ve eğitim araştırmalarında araştırma konusu olarak popüler hale gelmektedir (Karadoğan, 2016). Türkiye'deki alan yazın incelendiğinde çalışmaların, coğrafya öğretiminde okul dışı etkinlikler (Çiftçi ve Dikmenli, 2016; Taşoğlu, 2010), öğrenci ve öğretmen görüşlerine göre okul dışı öğrenme (Tatar & Bagriyanik, 2012), sosyal bilgiler ve tarih öğretiminde okul dışı öğrenme ortamları (Coşkun Keskin & Kaplan, 2012; Galip & Öztürk, 2019), okul dışı öğrenmede planetaryumlar (Sontay, Tutar & Karamustafaoğlu, 2016), okul dışı öğrenme ve erken çocukluk (Zeynep, Akgümüş & Cavalı, 2012), okul dışı öğrenme etkinlikleriyle desteklenmiş Türkçe öğretimi (Çobanoğlu & Gül, 2017), okul dışı öğrenme etkinliklerinin bilimsel süreç becerilerine etkisi (Civelek & Akamca, 2018) konularına odaklandıkları görülmektedir. Ayrıca, sınıf dışında eğitim ve okul dışı öğrenmeye odaklanan ulusal bilimsel projeler, TÜBİTAK 2237, TÜBİTAK 4004 Doğa Eğitimi ve Fen Okulları tarafından desteklenmektedir.

Aslan ve Demircioğlu (2018), okul dışı öğrenme ortamlarında yapılan çalışmaların içerik analizini yapmakta ve okul dışı öğrenme ortamlarının öğrencilerin öğrenme deneyimlerini, sosyalleşme süreçlerini ve derin öğrenmeyi zenginleştirdiğini vurgulamaktadırlar. Okul dışı öğrenme ortamları ile ilgili Türkiye'deki lisansüstü çalışmaları inceleyip toplam 40 (8 Doktora, 32 yüksek lisans tezi) çalışma tespit etmişlerdir. Okul dışında öğrenmenin, Fen bilimleri alanında, ortaokul öğrencileri ve öğretmenleri arasında daha yaygın olduğu görülmektedir. Okul dışı öğrenme için genellikle bilim merkezleri, müzeler ve hayvanat bahçeleri tercih edilmektedir. Ek olarak, içerik analizinde, resmi olmayan dışarıdaki ortamlarda öğrenmenin öğrenci başarısını artırdığı, bilimsel süreç becerilerini geliştirdiği, derse yönelik tutumları ve motivasyonları olumlu yönde etkilediği görülmektedir. Mutlu ve Çelik (2019) çalışmasında, okul dışı öğrenme ortamlarının öğrencilerin yaparak yaşayarak öğrenmelerinde, soyut kavramları belirli bir disiplin içerisinde somutlaştırmalarında ve kalıcı öğrenmelerinde etkili olduğunu iddia etmektedirler. Okul dışında öğrenmeyle ilgili araştırmaların çoğunun okul dışı öğrenme ortamlarına ilişkin öğrenci görüşlerine, fen öğretiminde okul dışı öğrenme ortamlarının önemine, bu tür ortamları ziyaret ederken karşılaşılan zorluklara, okul dışı eğitimin akademik başarı ve öğrencilerin tutumları üzerindeki etkilerine odaklandığı bulgusuna erişmişlerdir. Okul dışı öğrenme ortamlarında ne tür öğrenme etkinliklerinin tasarlanabileceği ve özellikle öğrencilere verilecek görevler için detaylı bir prosedür sağlayan çalışmalara ihtiyaç olduğu düşünülmektedir.

Karadoğan (2016) okul dışı öğrenme ortamlarının, okul dışı / sınıf dışı uygulamaları ve özellikle doğa bilimlerinde örgün eğitimi tamamlayacak etkinlikleri içeren gerçekten geniş bir yelpazeye sahip olduğunu ifade etmektedir. Bunlar gezi-gözlem ve saha çalışmaları, sosyo-kültürel, endüstriyel ve bilimsel mekanlar (müzeler, doğa tarihi müzeleri, bilim ve teknoloji müzeleri, planetaryumlar, arboretumlar ve botanik bahçeleri, hayvanat bahçeleri, meteoroloji istasyonu, su arıtma tesisi, barajlar, sanayi kuruluşları vb.), sanal gerçeklik uygulamaları, doğa eğitimleri, çevre kulüp faaliyetleri, mekanla doğrudan ilgili ödev ve projeler, spor faaliyetleri (özellikle doğa sporları), sosyal ve kültürel ve bilimsel programlar (sergiler, toplantılar, kongreler, paneller, konferanslar ve sempozyumlar), yaşam boyu öğrenme için mekânsal düzenlemeler ve kendi kendine öğrenme ortamlarıdır. Okul dışı öğrenme ortamları sadece ormanlar, kaleler ve müzelerle, hatta yukarıda sayılan bu alanlarla sınırlı değildir. Okulun dışında bir öğrenme ortamı olarak tasarlanan fiziksel veya sanal bir ortam, öğrencilerin içeriği keşfetmelerine ve öğrenmelerine yardımcı olur. Bu nedenle, okul dışı öğrenmenin eğitsel değerinin potansiyeli düşünüldüğünde, okullarda sınıfın dışında öğrenmeyi benimsemek ve müfredata dahil etmenin uygun bir politika olacağı düşünülmektedir. Ernst (2014), okul dışı öğrenme ortamlarının kullanımında öğretmenlerin zaman eksikliği, hava koşullarının elverişsizliği, doğal dış mekân ortamlarına erişim/ulaşım ve güvenlik endişeleri gibi okul dışı etkinlikleri yapmaktan vazgeçirebilecek bazı sınırlamalar olduğu ifade etmektedirler. Bununla birlikte, kısıtlamalara rağmen, okul dışı öğrenme ve doğal dış mekân ortamlarının kullanımı, erken yaş çocukları için temel öğrenme fırsatları sağladığı için desteklenmelidir. Fakat, Harun ve Salamuddin (2013) okul dışı öğrenmelerde öğrenenlerin bazen ortamdaki etkinliklerden keyif almak dışında herhangi bir ürün öğrenmediklerini ve bunun nedeninin okul dışı etkinliklerin ilgisiz bir şekilde planlanması ve bunun sonucunda öğrencilerin asıl öğretim programına ilgisinin azalması olduğunu belirtmektedir. Eğitimciler, iyi planlanmış bir okul dışı öğrenme

prosedürünün yardımıyla, doğal dış mekân ortamlarında daha fazla dikkat ve çaba göstererek, okul dışı öğrenme ortamlarından elde ettikleri faydaları en üst düzeye çıkarabilirler. Bu konuyla ilgili olarak, Donaldson ve Goering (1970), okul dışında öğrenmenin başarılı bir şekilde anlaşılması için temel ilkeleri belirlemişlerdir. Daha iyi bir okul dışı öğrenme deneyimine rehberlik edebilecek ilkeler şu şekilde özetlenmiştir:

1. Okul dışı öğrenme dış mekanları kullanan bir yöntem ya da süreçtir.

2. Okul dışı öğrenme ayrı bir disiplin değildir; başlı başına bir konu alanı değildir.

3. Okul dışındaki doğrudan deneyimler kişinin çevresini, dolayısıyla genel eğitimi için önemlidir.

4. Yararlı okul dışı deneyimler birkaç dakika kadar kısa olabileceği gibi, birkaç gün veya hafta kadar uzun da olabilir.

5. Kapsamlı bir okul dışı öğrenme programı her yaştan çocuklar için dış dünyada doğrudan deneyimler sağlamaktadır.

6. Okul dışı öğrenme öğreneni dahil etmekte; keşfedici yaklaşımı benimsemekte ve çoklu duyguları işe koşmaktadır.

7. Okul dışı deneyimler, çağdaş eğitimin önemli bir parçasıdır.

8. Okul dışı öğrenme boş zamanın akıllıca kullanımı için gerekli olan beceri ve anlayışları geliştirmek için kullanılabilir.

Okullarda örgün öğrenmeyi tamamlayacak çeşitli okul dışı öğrenme ortamları bulunmaktadır; ancak bu kadar çok çeşitli uygulama alanlarının varlığına rağmen, okul dışı öğrenmelerin uygulanmasında pek çok sorun ve eksiklik bulunmaktadır (Karadoğan, 2016). Okul dışı öğrenmelerin uygulanmasındaki bu eksiklikler bazen öğretmenlerin sınıf dışında öğretim yapma konusundaki endişelerinden kaynaklanmaktadır. Bu, öğrencilerin kendileri için olumlu ve eğitim açısından değerli deneyimleri kaçırmalarına yol açmaktadır. Türkiye'de öğretmen yetiştirme programları öğretmen adaylarının okul dışında öğrenmenin değerini anlamasını sağlamak ve bunun uygulanmasının önünü açmak için "okul dışı öğrenme ortamları, müze eğitimi" gibi ders imkanları sunmaktadır. Donaldson ve Goering (1970), öğretmen yetiştirme programlarının okul dışında öğrenmeyle ilgili içerikler barındırması gerektiğini, öğrencilerin okul dışı öğrenmenin değerini anlamasının, okul müfredatıyla ilişkisini kurmasının, dış mekan deneyimleri için gereken planlama becerilerini anlamasının, akran bir topluluk içinde hareket etmenin değerini takdir etmesinin, ve çocuğun bütüncül gelişimi ile ilgilenmesinin bir ihtiyaç olduğunu vurgulamaktadırlar.

Özetlemek gerekirse, okul dışı öğrenme etkinliklerinin uygulanmasında birtakım potansiyel zorluklar bulunabilir, fakat üzerinde düşünülmüş ve iyi organize edilmiş bir planla, bu potansiyel zorlukları çözmek ve ardından dışarıda öğrenme fırsatlarından yararlanmak mümkündür. Bu çalışmada, bir dersin programına entegre edilmiş okul dışı öğrenme etkinlikleri tasarlanmış ve öğretmen adayları bir seçmeli dersin programının bir parçası olarak okul dışı öğrenmeyi deneyimlemişlerdir. Daha sonra bu çalışma, öğretmen adaylarının okul dışı öğrenme hakkında ne düşündüklerini keşfetmeye odaklanmıştır. Bu çalışmanın özgün bir yönü, okul dışı öğrenme etkinliklerinin öğretmen adayları tarafından resmi bir öğretim programı ve kazanımları bağlamında deneyimlenmesidir. Sınıfta

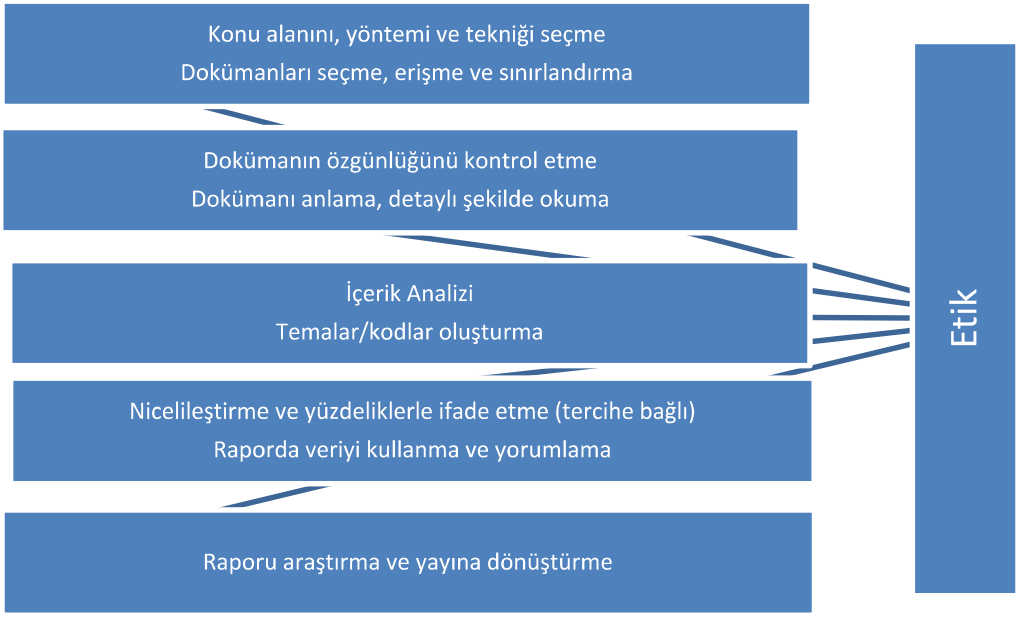
öğrenme ve okul dışı öğrenme arasındaki suni ayrımı azaltmak, resmi öğretim programı ile okul dışı öğrenme arasında bir bağlantı kurmak için önemli çaba sarf edilmiştir.

Bu çalışmanın amacı, okul dışı öğrenmeyi bir dersin resmi öğretim programına entegre etmek ve öğretmen adayları için seçmeli bir derste okul dışı öğrenme deneyimleri tasarlamaktır. İkincil olarak, öğretmen adaylarının okul dışı öğrenme ortamlarına ilişkin algıları belirlenmeye çalışılmıştır. Son olarak, bu çalışma okul dışı öğrenme için bir çerçeve geliştirmeyi amaçlamaktadır. Buna göre, bu çalışmanın araştırma soruları şu şekildedir:

1. Okul dışı öğrenmenin resmi öğretim programına entegre edilmesiyle ilgili öğretmen adaylarının görüşleri nelerdir?
2. Hangi mekân ve ortamlar öğretmen adayları tarafından okul dışı öğrenme ortamı olarak görülmektedir?
3. Okul dışı öğrenme ortamlarında öğretmen adaylarının yaşadığı zorluklar nelerdir?
4. Ne tür bir kavramsal çerçeve okul dışı öğrenmeyi yansıtabilir?

YÖNTEM

Bu araştırma, yöntem olarak nitel araştırma yöntemlerinden doküman analizini benimsemektedir. Bu araştırmada doküman analizi, "Okul Dışı Öğrenme Ortamları" dersi kapsamında araştırmacı tarafından tutulan gözlem kayıtlarına ilişkin notlar ve öğretmen adaylarının yansıtıcı günlüklerinden oluşan belgeleri içermektedir. Doküman analizi, yazılı belgelerin içeriğini dikkatli ve sistematik bir şekilde analiz etmek için kullanılan nitel bir araştırma yöntemidir (Wach, 2013). Nitel araştırmada kullanılan diğer yöntemler gibi, doküman analizi de bir anlam ifade etmek, ilgili konu hakkında bir anlayış oluşturmak ve deneysel bilgi geliştirmek için verilerin analizini ve yorumlanmasını gerektirir (Corbin & Strauss, 2008). Araştırmada kullanılabilecek belge türleri; ilanlar, ajandalar, katılım kayıtları, davetiyeler, toplantı notları, kılavuzlar ve kılavuzlar, notlar, kitaplar ve broşürler, günlükler, dergiler, program kayıtları, mektuplar, muhtıralar, haritalar, çizelgeler, gazeteler, sanat eserleri, program ayrıntıları, radyo TV programı senaryoları, örgütsel raporlar, anket verileri, çeşitli kamu kayıtları, defterler, fotoğraf albümleri ve benzeri belgelerdir ve bu belgeler, çalışmada kullanılmak üzere araştırmacılara veri sağlamaktadır (Labuschagne, 2003). Katılımcı gözlemi de belge toplama yoluyla elde edilen verilerin karşılaştırılması sürecinde bilginin geçerliliğini test etme çabası olarak görülebilir (Patton, 1990). Şekil 1'de, Kıral'ın (2020) önerdiği doküman analizi adımları yer almaktadır:



Şekil 1: Doküman Analizi Adımları

Kaynak: Kıral, 2020

Şekil 1'de görüldüğü gibi araştırma süreci konu, yöntem ve teknik seçimi ile başlamaktadır. Çalışılacak belgelere karar verilip ulaşıldıktan sonra sıra belgelerin sınırlandırılmasına gelir. İkinci adım, belgenin orijinalliğini teyit etmek, belgeyi ayrıntılı olarak okumaktır. Üçüncü adım, içeriği analiz etmektir. Dördüncü adım, çalışmadaki verileri kullanmak ve yorumlamaktır. Son adım, raporu araştırmaya ve yayınına dönüştürmektir.

Çalışma Grubu

Öğretmen adaylarının okul dışı öğrenme ile ilgili deneyimler edinmelerini ve sonra buna yönelik algılarını incelemek amacıyla, okul dışı etkinliklerin sınırlılıkları da göz önünde bulundurularak, bu araştırmaya Sosyal bilgiler eğitimi bölümünde (n=10), Okul öncesi eğitimi bölümünde (n=8), Türkçe eğitimi bölümünde (n=6) ve Sınıf eğitimi bölümünde (n=4) öğrenim gören 28 öğretmen adayı katılmıştır. Bu katılımcılar, daha önce herhangi bir programın parçası olarak hiç okul dışı deneyimleri yaşamamış olduklarını belirtmişlerdir. Katılımcılar, 2019 bahar döneminde Sinop Üniversitesinde "Okul Dışı Öğrenme Ortamları" meslek seçmelisi dersini alan öğretmen adaylarından oluşmaktadır. Öğretmen adayları bu çalışmaya katılmak için gönüllü olmuşlardır. Çalışmanın içeriği ve amacı hakkında bilgilendirilmişler ve ardından çalışma için izinleri istenmiştir. Toplanan verilerin araştırma kapsamında kullanılması için sözlü rızaları alınmıştır. Bu ders kapsamındaki öğrenme kazanımları ve üniteler, katılımcıların kampüsün dışında okul dışı öğrenmeyi deneyimlemelerine olanak sağlayacak şekilde araştırmacı tarafından etkinliklerle tasarlanmıştır. İdeal olarak, okul dışı öğrenme deneyimleri için verilen süre, öğrenme ortamının uzaklığına ve ulaşımın sınırlamasına bağlı olarak bir saat ile dört saat arasında değişmiştir. Katılımcılardan dersin ilk haftasında okul dışı öğrenme deneyimleriyle ilgili duyguları hakkında genel bir değerlendirme yapmaları istenir. Bu sayede katılımcıların uygulama öncesinde okul dışı öğrenme deneyimlerini

nasıl algıladıklarını ortaya çıkarmak amaçlanmıştır. Ayrıca düşüncelerini ve duygularını özgürce ifade edebilecekleri günlükleri nasıl yazacakları konusunda dikkat etmeleri gereken hususlarda bilgilendirildiler. Yazarken rahat hissetmenin önemli olduğu konusunda bilgilendirildikten sonra; günlüklerini okuyan diğer kişilerin ne anlama geldiğini doğru bir şekilde anlayabilmelerinin de önemli olduğu hususunda bilgilendirildiler. Özellikle günlüklerinde şu tür soruları yanıtlamaları teşvik edilmiştir: Hangi mekanlar okul dışı öğrenme ortamı olabilir? Bir mekânı okul dışı öğrenme ortamı yapan şey nedir? Okul dışı öğrenme ortamları öğrenmeyi nasıl desteklemektedir? Okul dışı öğrenme ortamları öğrencilerde ne tür gelişmeler sağlamaktadır? Uygulama yapılmadan önce araştırmacı ile çalışma grubu ilk hafta grup tartışması gerçekleştirmiş ve bu grup tartışmasında, okul dışı öğrenme üzerine farklı görüşlerin olduğu görülmüştür.

Tablo 1. Katılımcıların Uygulama Öncesinde Okul Dışı Öğrenmeye İlişkin Yaklaşımları (*N*=28)

Öğretim Programı		**Bölüm**				**Toplam**
		Sosyal bilgiler eğitimi	Okul Öncesi Eğitimi	Türkçe Eğitimi	Sınıf Eğitimi	
Olumlu	Resmi öğretim programının okul dışı öğrenme ortamları ile bütünleştirilmesi	7	4	2	1	14
Olumsuz		2	2	2	3	9
Kuşkusu olanlar		1	2	2	-	5

Öğretmen adaylarının sadece yarısının (n=14) okul dışı öğrenme deneyimleri konusunda motivasyon sahibi olduğu; fakat, birçok katılımcının (n=9) okul dışı öğrenmeyle ilgili olumsuz bir yaklaşımları olduğu görülmektedir. Okul dışı öğrenmenin etkililiği hakkında şüphesi olan ne benimseyen ne de karşı olan katılımcılar da bulunmaktadır. Bu durum öğretmen adaylarının okul dışı deneyimler yaşamadıkları ve sınırlı bilgileri oldukları için normal bir durum olarak kabul edilebilir. Milli Eğitim Bakanlığı 2023 Eğitim Vizyonu kapsamında her ne kadar okul dışı öğrenme ortamlarının kullanımının altı çizilmişse de okul dışı temelli bir öğretimin uygulanabilmesi için temel derslere yönelik uygun program geliştirme çalışmaları yapılmasına ihtiyaç vardır. Türkiye'nin 2023 Eğitim Vizyonu'nda öğretmenlerin öğretim programlarına okul dışı öğrenme etkinliklerini dahil etme uyarlama becerileri geliştirmelerini desteklemektedir. Milli Eğitim Bakanlığı'nın (2018) yayınladığı 2023 Vizyonu raporunda, Temel Eğitim Hedef 2 başlığı altında okul dışı öğrenme ortamlarının önemi şu şekilde vurgulanmaktadır:

> "Okulların, bölgelerindeki bilim merkezleri, müzeler, sanat merkezleri, teknoparklar ve üniversitelerle iş birlikleri artırılacaktır."
>
> "Çocukların kendi bölgelerinin üretim, kültür, sanat ve coğrafi kapasitesini keşfetmesine, bitki ve hayvan türlerini, yöresel yemeklerini, oyunlarını ve folklorunu tanımasına, derslerle bütünleşik veya ders dışı etkinlik olarak ağırlık verilecektir." (Milli Eğitim Bakanlığı, 2018, s. 88).

Veri Toplama Araçları

Veri toplama araçları olarak bu çalışmada, öğretmen adaylarının okul dışı öğrenme hakkında düşüncelerini içeren yazılı günlükleri ve araştırmacının gözlem notları kullanılmıştır. Bu ders, iki saatlik bir meslek seçmeli dersi olarak on dört hafta sürmektedir. Okul dışı öğrenme etkinliklerinin uygulanması için sekiz hafta ayrılmış ve öğretmen adaylarının en az beş temel okul dışı öğrenme etkinliği deneyimlemesi sağlanmıştır. Katılımcılara, her okul dışı öğrenme deneyiminden sonra bir günlük oluşturmaları ve yansıtıcı düşüncelerini yazmaları için ödevlendirilmiştir. Uygulama boyunca düşüncelerini yansıtmaya devam etmişler ve sonunda araştırmacıya doküman olarak sunmuşlardır. Ayrıca başka bir doküman ise, araştırmacının tuttuğu gözlem notlarıdır. Günlüklerde katılımcılar öncesinde nasıl günlük tutacakları konusunda bilgilendirilmiş ve uygulamanın başlangıcından bu yana birtakım kriterler sağlanmıştır. Günlükler eksik etkinlik olmadan tutulacak, düşünceleri bir bağlam içerisinde yazılacak ve deneyimleri eleştirel bir anlayışla yansıtılacaktır (Ersoy, 2015).

Veri Analizi

Nitel verilerin analizinde tümevarımsal veri analizi kullanılmıştır. Bu analiz, kodlama yoluyla verilerdeki örüntüleri, temaları ve kategorileri keşfetme yöntemidir (Patton, 2014, s. 453). Dey (1993)'in veri analiz aşamaları bu çalışmada benimsenmiştir. Nitel veriler ilk aşamada araştırmacı tarafından cümle cümle analiz edilmiş ve kodlar oluşturulmuştur. Ardından kodlara göre kategoriler oluşturulmuştur. İkinci kodlayıcıya nitel veriler ve bir kod tanımlama tablosu verilmiş ve verileri yeniden kodlaması istenmiştir. Güvenilirlik açısından veriler nitel araştırma konusunda deneyimli başka bir araştırmacı tarafından kontrol edilmiş ve kodlayıcılar arası güvenirlik hesaplanmıştır. İki araştırmacının kodlamaları üzerinde Miles ve Huberman'ın (1994) formülü uygulanmıştır. Bu çalışmada, araştırmacıların kodlama güvenirliği için uzlaşma yüzdesinin %80'in üzerinde olması gerektiğinden, araştırmacı ile ikinci kodlayıcı arasındaki kişisel gelişim alanı teması için uyuşma 0,86; sosyal gelişim alanı teması için uyuşma 0,84; okulla ilgili gelişim alanı teması için 0,80 olarak bulunmuş ve yeterli uyum gösterdiği saptanmıştır (Miles & Huberman, 1994, s. 64). Ayrıca iç geçerliliği artırmak için katılımcı onayı, doğrudan alıntı ve farklı görüşler ile veri analizi yürütülmüştür. Doğrudan alıntılarda katılımcının cinsiyeti ve bölümü belirtilmiştir. Bu çabalar, araştırmanın güvenilirliğini ve geçerliliğini artırmak için yapılmıştır.

Öğretim Programı Kapsamında Okul Dışı Öğrenme Deneyimlerinin Tasarlanması

Bu çalışma, "Okul Dışı Öğrenme Ortamları" meslek seçmeli dersinde gerçekleştirilmiştir. Okul dışı öğrenme ortamları, bireyin öz farkındalığını, doğaya saygısını artırdığı, hem fiziksel hem de zihinsel olarak daha dikkatli olmaya yardımcı olduğu için etkili bir öğretim için önemli bir potansiyel barındırmaktadır. Bu çalışma için ilham kaynağı okul dışı öğrenmelerin eğitsel potansiyelidir. İlk aşamada, bu dersteki öğrenme kazanımlarına hizmet edecek okul dışı öğrenme deneyimleri için belirli ortamlar belirlenmiştir. Sonra, öğretim programının içeriği ve kazanımları doğrultusunda öğretmen adaylarına yönelik okul dışı öğrenme etkinlikleri geliştirilmiştir. Örneğin, okul dışı öğrenme ortamları dersi araştırmacı tarafından üniteler halinde kurgulanmış ve bu ünitelere yönelik okul dışı öğrenme etkinlikleri geliştirilmiştir: "Bilim kafe nasıl yapılır?", "Öğrenme etkinlikleri için arboretumlar",

"Öğrenme etkinlikleri için planetaryumlar", "Müzelerin ders programları doğrultusunda kullanılması", "Gazete ve basın evleri: Verinin güvenilirliğini eleştirmek".

Ayrıntılı olarak açıklamak gerekirse, "Bilim kafe nasıl yapılır" ünitesine yönelik araştırmacı tarafından öğrenme kazanımları belirlenmiştir. Örneğin, bu kazanımlardan biri, resmi olmayan ve arkadaş canlısı bir kafede güncel bilimsel konular üzerine tartışmanın izleyiciler arasında eleştirel düşünmeyi nasıl teşvik ettiğini öğrencilerin fark etmeleridir. Öğretmen adayları tarafından bir kafe seçilmiş ve eğitim bilimleri alanında doçent olan bir bilim insanı/akademisyen "okul öncesinde alternatif eğitim olarak orman okulları" konulu konuşmaya davet edilmiştir. Daha sonra öğrencilerden okul dışı öğrenme ortamı olarak bu bilim kafede, bilim insanı/akademisyen ile tartışma yapmaları istenmiştir. Bilim kafelerin doğası gereği bilim insanıyla gerçekleştirilen tartışmalar yapılandırılmadan, öğrenenlerin ilgisi doğrultusunda gerçekleşmiştir. Bu çalışmada, bu şekilde öğretmen adayları için geliştirilen çeşitli sınıf dışı öğrenme deneyimleri yer almaktadır. Temel kriterler, okul dışı öğrenme ortamlarının ünitenin merkezinde yer almasıdır. Geliştirilen bu etkinlikler yapılandırmacı bir öğrenme perspektifi üzerine inşa edilmiştir. Arends'in (1998) iddia ettiği gibi, yapılandırmacı öğrenme anlayışı bilginin insan zihninde yaratıldığını ve öğrenenin deneyim yoluyla kendi anlamını yarattığını savunmakta, bu da anlamın önceki bilgilerle ortaya çıkan olayların etkileşimine karşı duyarlı olduğunu göstermektedir. "Öğrenme pasif olarak özümsenmekten ziyade inşa edilir, öğrenme aktif bir süreçtir, tüm bilgiler sosyal olarak yapılandırılır, tüm bilgiler kişiseldir, öğrenme zihinde vardır" şeklinde sıralanan yapılandırmacı kuramın ilkelerinin okul dışı öğrenme kavramıyla uyumlu olduğu görülmektedir (Driscoll, 2000; Fox, 2000; Vygotsky, 1978).

Okul dışı öğrenme fırsatları, ünitelerin öğrenme kazanımlarına bağlı olarak belirli bir zamanda belirli bir ortamda gerçekleşir. Bu içeriğin öğrenciler tarafından kendi deneyimleri ve sosyal etkileşim yoluyla keşfedilmesine özel önem verilmektedir. Bununla birlikte, tüm olumlu fırsatlarına rağmen, Cotton ve Cotton (2010) yabancı bir ortamda bulunma yeniliğinin, öğrenci deneyimini ve öğrenmeyi olumsuz etkileyebileceğini öne sürmekte ve okul dışı öğrenmede "yenilik" riski konusunda uyarıda bulunmaktadır. Yenilikle ilgili dört kategori bulunmaktadır: coğrafi, bilişsel, psikolojik ve sosyal. Bilişsel yenilik, alışılmadık bilimsel terimlerle, farklı bağlamlardaki kavramlarla ilgilidir. Alan dersi ise öğretim görevlilerine erişilerek bu çözülebilir. İkinci olarak, coğrafi yenilik, öğrencilerin dış mekân konumu ile yeni tanışmaları ile ilgilidir. Coğrafi yenilikle ilgili sorunlar önceden resimler, videolar ve haritalar kullanılarak çözülebilir. Üçüncüsü, psikolojik yenilik, yeni olaylara ve bunların endişe, yorgunluk, soğukluk ve açlık gibi yan etkilerine maruz kalmakla ilgilidir. Öğretmenlerin güvenlik sorunlarını önceden tahmin etmesi ve okul dışı öğrenme deneyimi sırasında katılımcıların sağlığını/durumunu izlemesi yoluyla çözülebilir. Son olarak, sosyal yenilik sosyal imkanlarla ilgilidir, ki bazı öğrenciler "evden uzakta olmakla ilgili ve sosyal baskıları stresli bulmakla ilgili" sorunları olabilir. Bu sorun, öğretmen ve diğer grup üyeleriyle yakın ilişki kurarak, onları iyi kalitede işler üretmeye destekleyerek azaltılabilir. Her bir riskte belirtildiği gibi, dışarıda öğrenme deneyimlerini teşvik etmek için, bu sorunlar okul dışı öğrenme etkinliği gerçekleştirmeden önce hazırlık yapılarak aşılabilir (Cotton & Cotton, 2009; Orion, 2007; Yunker, Orion & Lernau, 2011). "Öğrenme etkinlikleri için arboretumlar" ünitesinde, bilişsel yeniliklerini azaltmak amacıyla öğrenicilere herbaryum, arboretum, bitki florası vb. muhtemel

bilinmeyen terim ve kavramlar araştırmacı tarafından verilmiştir. Öğretmen adaylarının okul dışı eğitim ortamlarını her bir ziyareti, görev ve öğrenme ortamı hakkında ön bilgi ile yaklaşık üç ila dört saat sürmekte ve bu okul dışı öğrenme deneyiminden sonra ne tür görevler yapmaları gerektiği konusunda bilgilendirilmişlerdir. Bu etkinlik kapsamında keşif bahçesinde doğayı tanıma etkinliği ve ipek böceği serüveninin anlatıldığı bir yaratıcı drama etkinliği yapmışlardır. Bu çalışmada kullanılan okul dışı öğrenme ortamları planetaryum, botanik bahçesi, bilim kafe, arkeoloji müzesi ve basımevidir.

Okul Dışı Öğrenme Deneyimleri

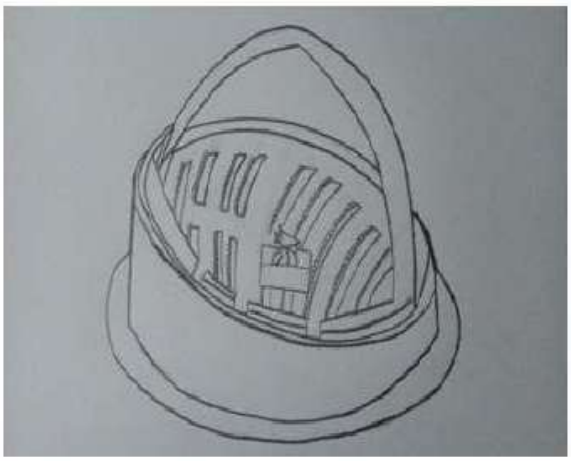
Okul dışı öğrenme deneyimleri eğer öğrenenlere kendi ilgilerini takip etme fırsatı tanınırsa daha değerli hale gelmektedir. Bu yüzden, seçilen okul dışı öğrenme ortamları katılımcıların kendi öğrenmelerini sağlayabilmeleri için onlar açısından anlamlı olması gerekmektedir. Kapalı sınıf ortamları okul dışı deneyimler kadar etkili olabilecek imkanlara sahip değildir. Bu çalışmada katılımcılar dersin programıyla ilişkili olarak aşağıda belirtilen okul dışı öğrenme etkinliklerini iş birliğine dayalı bir şekilde gerçekleştirmişlerdir.

1. Planetaryum

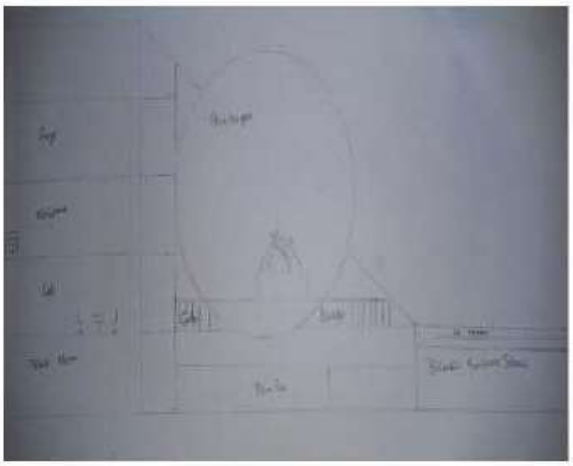
Öğretmen adaylarının, evrenin özüne ilişkin etkin gözlem ve araştırmalara katılmaları beklenmektedir. İlk okul dışı öğrenme ortamı planetaryumdur. Dünyanın dört bir yanındaki planetaryumlar hakkında bilgilendirme yapılmış, konuyla ilgili terim ve kavramlarla tanışmışlardır. Planetaryumlarda ne tür öğretim faaliyetlerinin yapılabileceği konusunda bilgilendirme yapılmıştır. Daha sonra öğretmen adayları, konumu öğrencilerin kampüsüne iki saat uzaklıkta olan Ondokuz Mayıs Üinversitesi Planetaryumu'na gezi planlayıp ziyaret etmişler, rehber ve öğretici eşliğinde bilgilendirmeden sonra öğrencilerden birtakım yıldızları işaretlemeleri, yıldızlar arasındaki deseni incelemeleri ve kendi isimlerinden bir takımyıldızı tasarlamaları istenmiştir. Örnek bir uygulama Ceren ismi takımyıldızı için şu şekildedir:

	A	B	C	..	E	....	J	N	...	R
A										
B										
C			*							
...										
E					*					
					*					
L										
N								*		
R										*

Ayrıca, planetaryum kapsamında kelime avcısı etkinliği ve Samanyolu'nu kim yuttu öykü yazma etkinliği gerçekleştirildi. Bu okul dışı öğrenme deneyiminin sonunda, öğretmen adaylarının kendi planetaryumlarını tasarlamaları ve bu planetaryumda temel eğitim kademesinde olan öğrenciler için bir öğrenme etkinliği planlamaları istenmiştir. Örnek olarak tasarlanan planetaryum ve geliştirilen öğrenme etkinliği Şekil 2 ve Şekil 3'te yer almaktadır:



Şekil 2: Katılımcıların çizdiği *Konuşan Galaksiler*



Şekil 3. Örnek planetaryum iç tasarımı

Öğrenme Etkinliği: Retorik ve metin türleri

Hedef Kitle: 7. Sınıf

Ders: Türkçe

Öğrencilere "retorik" kavramı hakkında önceden bilgi verilir. Planetaryumda bununla ilgili bilgi toplamaları istenir. Konuyu anlattıktan sonra öğrencilerden gezegenler, yıldızlar ve galaksi hakkında konuşmalarını ve birbirleriyle anlatıcı rolüyle konuşmalarını istenir. Öğrenciler 2 gruba ayrılır. Bir grup "anlatıcı grubu", diğer grubu "cevap grubu" olur. Anlatıcı grubunda öğrenciler retorik kullanarak cümleler oluşturur. Cevaplama grubundakiler hangi konuşma sanatının kullanıldığını öğrenmeye çalışırlar.

Ders sonrası ölçme değerlendirme etkinliği: Gezi sonrası dağıtılan kavram haritasındaki boşlukları doldurmaları istenir. Böylelikle öğrencilerin ders sonrası konu hakkında düşünmeleri, içeriği anlamlı hale getirmeleri, ders sonrası öğrenmenin desteklenmesi ve zihinsel sürecin etkinleştirilmesi sağlanır.

2. Arkeoloji Müzesi

Müzeler, okulda öğrenilenlerle sundukları galerileri bütünleştirerek eğitimsel bir değere sahip olan dinamik öğrenme ortamlarıdır. Öğretmen adaylarından iletişim odaklı, öğrenci merkezli ve deneyimsel öğrenmeyi teşvik etmek amaçlı müzelerden nasıl yararlanabileceklerini listelemeleri beklenmiştir. Dünyada ne tür müzelerin var olduğu konusunda bilgilendirme yapılmış, konuyla ilgili terim ve kavramlar tanıtılmıştır. Müzelerde ne tür öğretim faaliyetlerinin yapılabileceği konusunda bilgilendirme yapılmıştır. Ardından, konumu öğrencilerin kampüsünden yarım saat uzaklıkta olduğu olan Sinop Arkeoloji Müzesi gezisi planlanmış ve ziyaret edilmiştir. Ayrıca belirli bir müze türü hakkında -çocuk müzesi- bilgi almak için müze müdürü ile temas kurulmuştur. Öğrenme deneyimi sürecinde öğretmen adayları öncelikle Ara-bul kağıtları verilmiş ve müzede yer alan nesneleri bulmaları istenmiştir. Ardından "Senin adın bu olsun" etkinliği ile o nesneleri kendileri isimlendirme yoluna gitmişler ve

oraya ilişkin zihinsel bir çerçeve geliştirmişlerdir. Ardından onlara o dönemle ilişki metin verilmiş ve metin çözümlemesi yapılmıştır. Bu okul dışı öğrenme deneyimi sonunda kendilerinden "Müzede bir çocuk koşuyor" isimli hayali bir proje yürütmeleri ve "müzede koşan çocuk" projesi için öğrenme etkinlikleri tasarlamaları istenmiştir. Ayrıca o müzeye özgü bir öğrenme etkinliği olarak kullanılacak rol kartları yazmaları istenmiştir. Şekil 4'te "müzede koşan çocuk" öğrenme etkinliği ve bu müzede kullanılmak üzere tasarlanmış rol kartları yer almaktadır:

Hedef Kitle: 4. Sınıf

Öğrenme kazanımları: Öğrenciler nesne/durum/olaya dikkat ederler. Öğrenciler seslerini uygun bir biçimde kullanırlar. Öğrenciler dili iletişim amaçlı kullanırlar.

Öğrenme Etkinliği: Müzede bir çocuk koşuyor

Öğretmen eğlenme ve öğrenme amaçlı çocukları bir müzeye götürür. Çocuklardan müzede gördüklerini dikkatlice gözlemlemelerini ister. Ziyarete hediyelik eşya dükkanında başlarlar, nesnelerle ilgi bilgiler ve koleksiyonları gösteren birkaç kartpostal alırlar. Daha sonra öğrencilerden kartpostalda bulunanları müzede bulmaları istenir. Kartpostalları tamamladıktan sonra, o müzede en sevdikleri nesne/durum/olayın ne olduğu sorulur ve kartpostalın arkasına en sevdikleri nesneyi, o nesnenin sanatçısına nedenleri ile anlatılır. İkinci etkinlik ise "hepsini karıştır" etkinliğidir. Öğrencilere 6 kareye bölünmüş boş bir kağıt verilir. Bir tabloyu ziyaret ettiklerinde, o tablonun bir parçasını bir karesine kopyalamaları istenir. Bir sonraki resme geçtikten sonra başka bir kareyi kopyalayıp boyamaya devam ederler. Okul dışı öğrenme deneyiminin sonunda ellerinde müzede sergilenen tüm sanatların karıştığı bir sanat eseri oluşmuş olur ve bu sanat eserini hayranlarına (grup üyeleri) anlatırlar.

Öğrenme Etkinliği: Bu etkinlik, öğretmen adayları tarafından geliştirilmiştir. Öğretmen adayların Sinop Arkeoloji Müzesinde öğrenme etkinliği olarak kullanılacak o müzeyle ilgili gerçek bilgilere dayalı rol kartları hazırlamışlardır.

Rol kartı

Karakter: Sinope

Tarih: M.Ö. 756

Mekan: Roma

Gerilim nedeni: Yeni bir kent kurmak isteyen göçmenler ve onlara liderlik etmeye hevesli bir kadın lider.

Başlama sahnesi/anı: Göçmenler antik kent Sinop'un ilk temellerini oluşturacak bir yere gelirler ve buraya Sinope adını verirler. Fakat, güçlü bir kadın karakter vardır ve onlara liderlik etmeye can atmaktadır. Rol kartı hazırlandıktan sonra müzede bulunan şu iki nesneyi kullanarak bir öykü oluşturmaları istenmiştir:

Şekil 4. Müzede Öğrenme Etkinliği içi Kullanılacak Rol Kartı Figürleri

3. Botanik Bahçe

Üçüncü okul dışı öğrenme ortamı bir botanik bahçesidir. Botanik bahçeleri, ziyaretçileri sadece bitkiler hakkında öğrenmeyi değil, aynı zamanda dünya, yani tüm canlıların çevresi hakkında da öğrenmeyi ve anlamayı teşvik eden okul dışı öğrenme ortamlarından biridir. Botanik bahçelerinin tarihsel olarak üniversiteler için nasıl bir araştırma, eğitim ve dinlenme yeri haline geldiği konusunda öğretmen adaylarına bilgilendirme yapılmıştır. Öğretmen adaylarının bir botanik bahçesindeki öğrenme deneyimlerine katılması, bir bitkinin parçalarını örneklemesi ve bitkilerin nasıl büyüdüğünü belirlemesi beklenmiştir. Daha sonra öğretmen adayları, konumu öğrencilerin kampüsünden yarım saat uzaklıkta olduğu için Sinop'ta yer alan bir botanik bahçesi gezisi planlayıp ziyaret etmişlerdir. Botanik bahçe kapsamında öncelik keşif bahçesinde doğayı tanıma etkinliği gerçekleştirmişlerdir. Burada botanikle ilgili temel kavramlar ve terimlerle ilgili öğretmen adaylarının farkındalıklarını artırılmak istenmiştir. Tutanak etkinliği yaptırılarak öğretmen adaylarından oradaki yaşamı gözlem ve kayıt altına almaları istenmiştir. Daha sonra, ipek böceği serüveninin anlatıldığı bir yaratıcı drama etkinliği yapmışlardır. Okul dışı öğrenme deneyiminin sonunda öğretmen adaylarından 7. Sınıf Fen Dersinde kullanılabilecek bir bitki teşhis anahtarı geliştirmeleri istenmiştir. Botanik bahçelerinin en iyi eğitsel değeri, içeriğin canlı bitkilerle öğretilmesidir. Öğretmen adayları temel eğitim düzeyinde bir öğrenme etkinliği geliştirmişlerdir. Örnek olarak geliştirilen bir teşhis anahtarı ve uygulaması Şekil 5'te yer almaktadır:

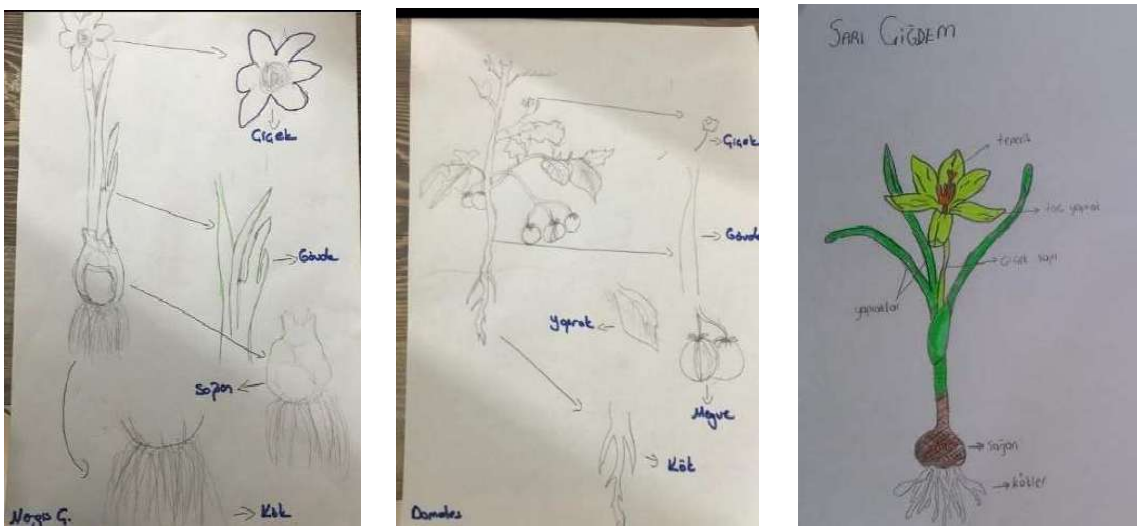
Öğrenme Etkinliği: Hadi bitkiyi tahmin et

Hedef Kitle: 7. Sınıf

Ders: Fen Eğitimi

	Bitki Teşhis Anahtarı		
Çiçeği var	X	X	X
Çiçeği yok			
Meyve ve tohum üretebilir	X	X	X
Meyve ve tohum üretemez			
Spor kesesi var			
İğneli yaprak			
Gerçek kök, gövde, yaprak yok			
Kozalaklı			
Basit yapraklı			X
Bileşik yapraklı		X	
Damarlı yapraklı	X		X
Tek çenekli	X		X
Çift çenekli		X	
Meyvenin içinde tohumları var		X	

A:Nergiz B : Domates C: Sarı Çiğdem



Şekil 5: Öğretmen Adaylarının Hazırladıkları Bitki Teşhis Anahtarından Örnekler

4. Bilim Kafe ya da Café Scientifique

İngiltere'de bulunan Café Scientifique, insanların bilimdeki güncel gelişmeleri ve fikirleri, çoğu zaman bir fincan kahve fiyatına keşfedebilecekleri ilk bilim kafedir (Dallas, 2006). Bilim kafeler, sınıflarda veya konferanslarda olduğu gibi ders tarzında olmadıklarından geleneksel öğrenme ortamlarının dışındadır. Kahvehane, lokanta, tiyatro gibi herhangi bir yer, bilimin bir konusu bir grup insan tarafından sakin bir ortamda, bir fincan kahve eşliğinde tartışıldığında bilim kafe olabilir. Bilim kafeler, insanların bilimsel konuları anlama ve öğrenmeye olan

ilgisini teşvik eder. Öğretmen adaylarına, tipik bir kafeyi bilim kafesi yapan kriterler ve Türkiye ve dünyadaki bilim kafe örnekleri hakkında bilgilendirme yapılmıştır. Daha sonra kampüslerinden uzakta olduğuna karar verdikleri bir yerde bir bilim kafe etkinliği gerçekleştirilmiştir. Bilim kafeler, katılımcıların kendilerinin de katkı sunabileceği deneyimleri olduklarını hissettiklerinde, bu etkinliğin daha etkili olacağı düşünüldüğü için öğrencilerin ilgileri ve kararları doğrultusunda o dönem popüler olan orman okulları hakkında bilim kafe yapılmıştır. Konu olarak orman okullarının amacı, öğretim programı, öğretmen-çocuk-veli ilişkisi ele alınmıştır. Belirledikleri uygun bir kafeye, okul öncesi eğitimde alternatif olarak orman okullarıyla ilgili bilgi almak için bu konuyu çalışan bir araştırmacıyı davet ettiler. Yaklaşık 35-40 dakika bilim insanının konuşması, 10-15 dakika da sonrasında katılımcıların soru-cevap ve tartışmaları sürmüştür. Bu etkinlikte öğretmen adaylarının bu okul dışı öğrenme ortamının eleştirel düşünmeyi nasıl desteklediği, tartışma ve aktif katılım açısından etkililiğini fark etmeleri amaçlanmıştır. Okul dışı öğrenme deneyiminin sonunda, bilim kafeler hakkındaki düşüncelerini yansıtmak için bir günlük yazmaları istenmiştir. Katılımcıların gizliliğinden dolayı bu etkinlikte bir görsele yer verilmemiştir.

5. Yerel Bir Basımevi

Son okul dışı öğrenme ortamı olarak yerel bir basımevi tercih edilmiştir. Bu ortam türü, öğrenmenin amacı eleştirel ve yansıtıcı bir şekilde düşünmek olduğunda çok değerlidir. Öğretmen adaylarının haberlerdeki bilgilerin güvenilirliğini ve doğruluğunu eleştirmeleri beklenmektedir. Bir hüküm vermeden önce okuduklarını kontrol etme konusunda bilgilendirme yapılmıştır. McGuinness, Eakin, Curry ve Sheehy (2006) eleştirel düşünmeyi öğretmek için şu becerilerin geliştirilmesi gerektiğinin altını çizmektedirler: verinin kaynağını kontrol etme, nedenini açıklama, tahmin etme ve genelleme becerileri. Gazeteler, basımevleri bu açıdan en iyi okul dışı öğrenme ortamlarıdır. Katılımcılardan kampüslerine yarım saat uzaklıkta bulunan yerel bir basımevi gezisi araştırmacı ve öğretmen adayları tarafından planlanıp ziyaret edilmiştir. Dünyada gazetelerde ne kadar yanıltıcı, yanlış haberlerin yer aldığını, önyargılı metinleri nasıl tanıyacaklarını gösteren örnekler hakkında bilgi almak için editörle iletişime geçilmiştir. Daha sonra ilginç ve doğru buldukları bazı kısa haberleri seçmeleri istenmiş ve birkaç değişiklik yaparak tekrar yazmaları istenmiştir. Yeni metni grup üyeleriyle değiştirmişler ve orijinal metni görmeyen katılımcılar kendilerine verilen metinde değiştirilen, yanıltıcı olan bilgiyi fark edip edemedikleri sorulmuştur. Okul dışı öğrenme deneyiminin sonunda, düşüncelerini yansıtmaları için günlük yazmaları istenmiştir.

BULGULAR

Uygulamanın sonunda, araştırmacı ve öğretmen adayları ile grup tartışması yapmışlar ve süreci değerlendirmişlerdir. Katılımcıların çoğunluğunun (n=25) uygulama sonunda okul dışı öğrenmeyi olumlu olarak değerlendirdiği görülürken, hala okul dışı öğrenmenin zaman alıcı, zahmetli olduğunu ve etkililiği için de iyi bir tasarımın gerekliliğini düşünen öğretmen adaylarının bulunduğu da görülmektedir (n=3). Sınıfta öğrenme ile okul dışı öğrenme arasındaki fark katılımcılar tarafından açıkça fark edilip vurgulanmakta, bu tür otantik öğrenme deneyimlerinin öğrenme sürecini ve kalıcılığı etkilediği ifade edilmiştir. Genel olarak, okul dışı öğrenme

deneyimlerinin, çevrelerindeki doğal yerlere katılmaya gerçekten istekli ve hazır olan katılımcılar tarafından benimsendiği görülmektedir. Hangi ortamların/alanların okul dışı öğrenme ortamı olarak kabul edilebileceği konusunda öğretmen adayları çok doğru ve makul yerler belirlemişlerdir. Öğretmen adaylarının bakış açısına göre, okul dışı öğrenme ortamları olarak en çok kabul ettikleri mekanlar müzeler, bilim merkezleri, milli parklar, sanat galerileri ve sanatçı stüdyoları iken; planetaryumlar, en az farkında oldukları mekanların botanik bahçeleri, medrese ve kale gibi tarihi yerler, endüstri, medya gibi iş yerleri ve son olarak doğanın kendisi olduğu görülmüştür. Örnek görüşlere aşağıda yer verilmektedir:

> *Müze:* "Her ne kadar okul dışı etkinlikler zahmetli olsa da, öğrenmeyi pekiştirmektedir. Özellikle müzeler öğrenme etkinlikler açısından kullanışlıdır. Ben kendim de müzelerde bir şeyler yapmayı seviyorum. Müzede ne not aldıysam onu gerçekten hatırlayabiliyorum." (A2, Kadın, Türkçe Eğitimi)

> *Bilim merkezi:* "Dersler için okulun dışındaki ortamlarla ilgilenen biri değilim. Bu ortamların yararlı olup olmadığıyla da. Ancak, benim için bile, öğrenme amaçlı bir bilim müzesinde olmak çok heyecan verici ve akılda kalıcı! Bilim merkezleri gibi bazı spesifik okul dışı öğrenme ortamlarıyla daha yakından ilgileniyorum" (A17, Erkek, Sosyal Bilgiler Eğitimi)

> *Milli Park:* "Ders başarısı her şey demek değil. Çevreye saygı üzerinde de durmalıyız. Örneğin, Türkiye milli parklar açısından zengin. Bunları derslerimiz için kullanmalıyız." (A9, Kadın, Okul Öncesi Eğitimi)

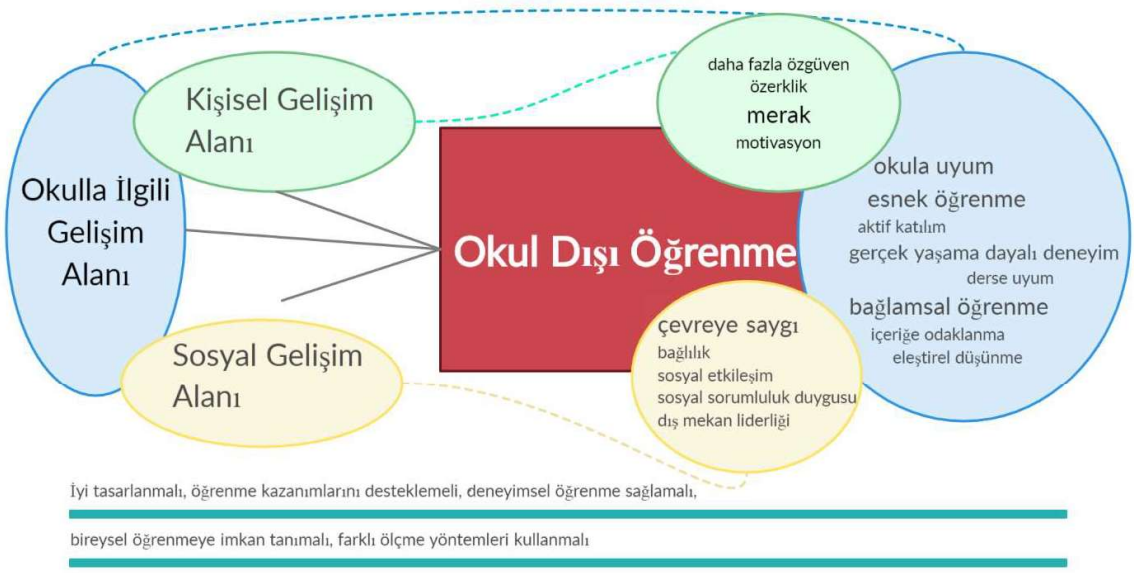
> *Sanat Galerisi:* "Bir sürü okul dışı ortam var. İlk aklıma sanat galerileri geliyor. Büyük şehirler bunun için daha şanslı. Bu galeriler öğretmenlere birçok fayda sağlayabilir çünkü bu tür ortamları deneyimleyen öğrenciler daha fazla etkileşimde bulunur, daha fazla keşfeder ve daha fazla öğrenir." (A1, Kadın, Sınıf Eğitimi)

> *Planetaryum*: "Planetaryumlar iyi birer örnek. İyi bir öğrenme ortamı oluşturmak için kaynak olabilirler. Öğrencilerin okul başarısı için önemli olabilirler." (A21, Erkek, Sınıf Eğitimi)

Çoğunlukla okul dışı öğrenme ortamlarının heyecan verici, akılda kalıcı olması ve çeşitli duyulara hitap ederken zengin bir öğrenme deneyimini de içermesi gerektiğine vurgu yapmışlardır. Öğretmen adaylarının bakış açısına göre, okul dışı öğrenme ortamlarında belirli öğrenme etkinlikleri daha sık gerçekleştirilebilir. Okul dışı öğrenme etkinlikleri olarak şunlar ifade edilmiştir: deney yapma, keşif etkinlikleri, yaratıcılık etkinlikleri, hayal gücü gerektiren etkinlikler, işbirliğine dayalı etkinlikler, gözlem etkinlikleri ve yansıtıcı etkinliklerdir. Deneyler yapmanın, öğrencilerin bazı fikirleri keşfetmelerini gerektiren görevlerin, doğadaki olayları ve yaratıcılığı teşvik eden etkinliklerin, okul dışında öğrenme için çok uygun olduğu açıktır. Ancak öğretmen adayları, okul dışında öğrenmeyi kolaylaştıran veya risk oluşturan bazı faktörleri de belirtmişlerdir. Onların görüşüne göre, bu faktörler öğretmenlerin profesyonellik düzeyleri, öğrencilerin öğrenme ortamındaki fiziksel ve duygusal durumu, örgütsel destek ve okul dışı öğrenme ortamının uzaklığıdır. Katılımcılar öğretmenin profesyonellik düzeyini okul dışı öğrenme deneyimlerini kolaylaştıran en önemli faktör olarak görmektedirler. Öğretmenin profesyonellik düzeyi,

bu tür ortamlarda liderlik etmek için ne kadar iyi eğitimli olduğu ve okul dışı öğrenmeye istekli olmakla ilgilidir. İkincisi, öğrencilerin okul dışı öğrenme deneyimlerindeki rahatlığıdır. Bu rahatlık hem duygusal hem de sağlık açısından bir rahatlıktır. Örgüt desteği bile öğrencilerin rahatlığından sonra gelmektedir. Katılımcılar, okul dışı öğrenme alanlarının fiziksel mesafesini en az önemli kriter olarak değerlendirmektedirler.

Öğretmen adaylarından okul dışı öğrenmenin etkililiğini değerlendirmeleri istenmiş ve bulgular, okul dışı öğrenmenin kişisel gelişim, sosyal gelişim ve okulla ilgili gelişim olmak üzere üç alanda olumlu sonuçları olduğunu göstermiştir. Okulla ilgili gelişim alanının gerçek yaşama dayalı öğrenme deneyimleri (f=20), okula uyum (f=20), esnek öğrenme/ esnek program (f=19), aktif katılım (f=19), derse uyum (f=18), içeriğe odaklanma (f=17), eleştirel düşünme (f=15) ve bağlamsal öğrenmeyi (f=14) kapsadığı ortaya çıkmıştır. İkinci olarak, sosyal gelişim alanın çevreye saygı (f=19), bağlılık (f=17), sosyal etkileşim (f=17), sosyal sorumluluk duygusu (f=15), dış mekan liderliğini (f=13) kapsadığı ortaya çıkmıştır. Son olarak, kişisel gelişim alanının, merak (f=18), daha fazla güven duygusu (f=17), özerklik (16) ve motivasyon (f=16) kavramlarını kapsadığı ortaya çıkmıştır. Ek olarak, veriler, okul dışı öğrenmenin en sık görülen faydalarının gerçek hayata dayalı öğrenme deneyimleri, esnek öğrenme/esnek program, okula uyum, merak, bağlamsal öğrenme ve çevreye saygı olduğu görülmektedir. Öğretmen adaylarının görüşlerine dayanarak, Şekil 6'da gösterilen okul dışı öğrenmeyi yansıtan bir çerçeve geliştirilmiştir:



Şekil 6. Okul Dışı Öğrenme Çerçevesi

TARTIŞMA

Bu çalışmanın bulguları, okul dışı öğrenme ortamlarının kişisel gelişim, sosyal gelişim ve okulla ilgili gelişim fırsatları sunduğunu, dolayısıyla resmi öğretim programlarının entegre edilmesinin desteklenmesi gerektiğini göstermektedir. Bu çalışmada, okul dışı öğrenmelerin etkililiği, okul dışında öğrenmeyi deneyimleyen katılımcıların görüşleri ile kanıtlanmıştır. Akademik bir içerikle ilgili öğrenme hedeflerine ulaşmak için okul dışı

öğrenme etkinliklerinin iyi tasarlanması gerektiği, iyi planlanan okul dışı öğrenme ortamlarının eğitim sisteminin hedeflerine ulaşmak için otantik mekanlar olarak hizmet etme potansiyeline sahip olduğu görülmüştür.

Bu çalışmanın bulguları incelendiğinde, öğretmen adayları okul dışı öğrenmelerle ilgili en çok deneyimsel öğrenmeye, bireysel öğrenmeye imkan tanınmasına ve öğrenme kazanımlarının ön planda olmasına vurgu yapmışlardır. Ayrıca, okul dışı öğrenmelerin esnek öğrenme ve gerçek yaşama dayalı öğrenmelere dayandığını, aktif katılımı teşvik ettiğini ve içeriğe odaklanmayı kolaylaştırdığını vurgulamışlardır. Priest'e (2010) göre, okul dışı öğrenmenin kendine özgü nitelikleri ve özellikleri bulunmaktadır. Öncelikle okul dışı öğrenme bir öğrenme yöntemidir ve dışarıda gerçekleşmektedir. İkinci olarak, tüm duyuların kullanımını gerektirmekte, deneyimselliğe önem vermekte, disiplinler arası konu alanına dayanmaktadır. Bu açıklamada görüldüğü gibi, doğası gereği okul dışı öğrenme daha kişisel, deneyimsel ve özelleştirilmiş bir öğrenmeye fırsat vermektedir. Dillon, Rickinson, Teamey, Morris, Choi, Sanders ve Benefield (2006) tasarlama aşamasına dikkat çekmişler ve öğrenme etkinliklerinin ve okul dışı öğrenmelerin iyi tasarlanması ve değerlendirme boyutunun önemli olduğunun altını çizmişlerdir. Okul dışı öğrenme, sınıf içinde yapılan etkinliklerden daha dikkatli tasarlanmalıdır ve ölçme-değerlendirme süreci de benzer şekilde okul dışı öğrenmede çok önemlidir. Bununla birlikte, Ballantyne ve Packer (2002, s. 228), okul dışı öğrenmelerde öğrenme etkinliklerinin aşırı yapılandırılmasını bir risk olarak değerlendirmektedirler. Bu aşırı yapılandırma durumu, esasen okul dışı öğrenmelerin özüne uygun değildir. Ayrıca çalışma sayfalarının kullanılması ve not alma gibi uygulamaların öğrenciler arasında popüler olmadığını ve öğrenmeye büyük ölçüde katkıda bulunmadığını belirtmektedirler. Okul dışı öğrenme ortamlarındaki etkinliklerin ilk elden deneyimlemeye ve gerçek yaşamla ilişki kurmaya izin verdiği başka çalışmalarda da dile getirilmiştir (Bozdoğan & Kavcı, 2016; Ertaş, Şen & Parmaksızoğlu, 2011). Acar (2013) da okul dışı öğrenme ortamlarını tasarlarken doğrudan deneyimlerin ve doğal malzeme kullanımının önemine vurgu yapmaktadır. Acar, bu malzemelerin öğrencilerin kullanımı için işlevsel olmaları, okul dışı öğrenmelerde doğrudan deneyim fırsatları sunması gerektiğini ifade etmektedir. Behrendt ve Franklin (2014), öğrencilerin okulla bağlantısını güçlendirmek için okul dışı ortamları önemli eğitim araçları olarak görmüşler, formal ve informal ortamlarda edinilen deneyimsel öğrenmenin öğrencilerin ilgisini, bilgisini ve motivasyonunu artırdığını vurgulamışlardır.

Bu araştırmanın bulguları incelendiğinde, resmi öğretim programda yer alan kazanımların okul dışı öğrenme ortamlarında gerçekleştirilmesinde pek çok okul dışı mekânın uygun olduğu görülmektedir. Öğretmen adayları için okul dışı öğrenme ortamları olarak ilk başta müze, bilim merkezleri, milli parklar, sanat galerileri ve sanatçı stüdyolarını gelmektedir; fakat, öğretmen adayları planetaryumları, botanik bahçelerini, medrese ve kale gibi tarihi yerleri, endüstri ve medya gibi iş sektörlerini, son olarak doğanın kendisini de diğer okul dışı öğrenme ortamları olarak görmektedirler. Benzer şekilde Kubat'ın (2018) araştırma bulgularında fen bilgisi öğretmen adaylarının, okul dışı öğrenme ortamları olarak en çok bilim merkezleri ve bilim müzelerini; en az olarak da hayvanat bahçeleri ve planetaryumları gördüklerini ifade etmiştir. Topçu (2017) çalışmasında da en çok müzeler ve tarihi mekanların okul dışı öğrenme ortamı olarak görüldüğünü, milli parkların, okul bahçelerinin, resmi kurum ve kuruluşlarının ise okul dışı öğrenme ortamı olarak daha az tercih edildiği bulgusuna ulaşılmıştır. Dyment (2005) "ilkokul programında bir şeyler yapabileceğimiz olası 3000 mekan/ortam bulunmaktadır" diyerek, öğretmenlerin

öğretim programıyla bağlantı kurmasının gerekliliğine atıfta bulunmaktadır. Onun çalışmasında katılımcı öğretmenlerin okul dışında öğrenmeyle ilgili "şimdi matematik zamanı, dışarı çıkaramam" veya "bunda bir fayda göremiyorum" vb. şekilde düşündükleri görülmüştür; fakat öğretmenlerin, okul dışı öğrenme için tek bir konu alanı olmadığını fark etmelerine ihtiyaç vardır, özellikle dil dersleri, matematik ve coğrafya gibi bazı derslerin nadiren bu ortamlarda öğretildiği belirtilmektedir (Dyment, 2005). Karadoğan'ın (2016) çalışmasında, okul dışı öğrenme ortamlarına ve sınıf dışı uygulamalara örnekler verilmektedir. Özellikle doğa bilimlerinde resmi programı tamamlayacak etkinlikleri içeren geniş bir yelpazeye sahip birtakım okul dışı öğrenme ortamlarını şöyle sıralamaktadır: gezi-gözlem ve saha çalışmaları, sosyal, kültürel, endüstriyel ve bilimsel yerler (müzeler, doğa tarihi müzeleri, bilim ve teknoloji müzeleri, planetaryumlar, arboretumlar ve botanik bahçeleri, hayvanat bahçeleri, meteoroloji istasyonu), sanal gerçeklik uygulamaları, doğa eğitimleri, çevre kulübü faaliyetleri, sosyal ve kültürel ve bilimsel programlar (sergiler, toplantılar, kongreler, paneller, konferanslar ve sempozyumlar), yaşam boyu öğrenme için mekânsal düzenlemeler ve kendi kendine öğrenme ortamları. Yapılan çalışmalarda örneğin Ertaş Kılıç ve Şen'in (2014) çalışmasında enerji parkı, Feza Gürsey Bilim Merkezi ve bir teknoloji müzesi okul dışı öğrenme ortamları olarak tercih edilmiştir. Yıldırım'ın (2020) çalışmasında ise fen eğitimi dersi öğrenme kazanımları kapsamında tercih edilen okul dışı öğrenme ortamları arasında doğa, botanik bahçeleri, bilim fuarları, bilim müzeleri, tarih müzeleri, gözlemevleri, anatomi sergileri ve enerji parkları yer almaktadır. Okul dışı öğrenme ortamlarını belirli mekanlarla sınırlandırmak doğru olmamakla birlikte, yapılan çalışmalarda ön plana çıkan mekanlar incelendiğinde akvaryumlar (Falk & Adelman, 2003; Rahm & Ash, 2008), müzeler ve bilim merkezleri (Aktekin, 2008; Sturm & Bogner, 2010), hayvanat bahçeleri (Gupta, Fraser, Rank, Brucker & Flinner, 2019; Yavuz, 2012), enerji parkları (Balkan Kıyıcı & Atabek Yiğit, 2010; Ertaş, Şen ve Parmasızoğlu, 2011), botanik bahçeleri (Sanders, Ryken & Stewart, 2018; Wiegand, Kubisch ve Heyne, 2013), milli parklar (Glaab & Heyne, 2020; Güler, 2009) ve planetaryumlar (Özcan & Yılmaz, 2018) gibi mekanların okul dışı ortamlar olarak tercih edildiği görülmektedir.

Bu çalışmanın bulgularında okul dışı öğrenmenin bireysel ve sosyal gelişimi desteklediği kadar akademik gelişimi de desteklediği görülmektedir. Okul dışı öğrenmelerin okulla ilgili olarak derse ve okula uyumu artırdığı, aktif katılımı teşvik ettiği, içeriğe odaklanmayı sağladığı, eleştirel düşünmeyi ve gerçek yaşama dayalı öğrenme deneyimlerini önceliediği ve esnek öğrenmeyi desteklediği görülmektedir. Nicol (2003), okul dışı öğrenmenin bir araştırma konusu mu yoksa evrensel olarak kabul gören bir değer mi olduğunu tartışarak, okul dışı öğrenmeyle ilgili alan yazında öğretimden çok kişisel ve sosyal yönlerle ilgili öğrenme ürünlerine daha fazla önem verildiğini ileri sürmektedir. Benzer şekilde, bu araştırmanın bulgularında da okul dışı öğrenmenin çevreye saygı, bağlılık, sosyal etkileşim, sosyal sorumluluk duygusu ve dış mekân liderliği gibi çeşitli alanlarda sosyal gelişim sağladığı görülmektedir. Ayrıca, okul dışı öğrenme kişisel gelişim açısından daha fazla güven duygusu, özerklik, motivasyon ve merak duygusunu sağladığı da görülmektedir. Akademik başarı ile ilgili olarak Pfouts ve Schultzs (2003) üstün yetenekli öğrenenleri desteklemeyi amaçlayan okul temelli okul dışı öğrenme merkezlerinin etkililiğine değinmektedir. Bu kapsamda birtakım okulların kelebek bahçeleri, kuş beslemeleri, yerli bitki bahçeleri gibi küçük projeler oluşturduğunu; geniş ölçekli okulların ise daha büyük projeler oluşturduğunu, ekolojik ve eğitim amaçlı

sulak alanlar, göletler, doğa parkurları gibi etkinliklerde bulunduklarını belirtmektedirler. Üstün yetenekliler için uygun öğretim programları geliştirmenin zor olduğunu, geleneksel stilde devam eden sınıflarda üstün yeteneklilerin konu alanı ve içeriği kolayca anladıklarını, ancak bu konu alanına ve içeriğe derin ve kapsamlı bir şekilde odaklanmadıklarını; bu nedenle, okul dışı öğrenmeleri deneyimlemenin, geleneksel sınıfta bu çok az zorlanan yetenekli öğrencileri zenginleştirdiğini vurgulamaktadırlar. Crowder (2010), başarısız olma riskiyle karşı karşıya olan 14 lise öğrencisi ile birlikte İngilizce, Biyoloji, Matematik ve Geometri konularında okul dışı öğrenme etkinliklerinden yararlanmıştır. Okul dışı öğrenme deneyimlerinin akademik içerik üzerinde olumlu etkilerinin olduğunu görülmüştür. Crowder'ın (2010) tezinin bulgularında, deneyimsel öğrenme ortamlarının öğrencilerin akademik, davranışsal ve sosyal gelişimlerini desteklediği, risk altındaki öğrencilerin esnek olan dış ortamlarda bu tür öğrenme deneyimleriyle meşgul olduklarında temel kavramları daha iyi anladıkları görülmüştür. Yine de okul dışı öğrenme etkinliklerinde kalitenin ve iyi bir tasarımın ne kadar önemli olduğu vurgulamaktadır. Benzer şekilde, Beames, Higgins ve Nicol (2011), okul dışı öğrenmenin disiplinler arası tasarıma izin verdiğinin altını çizmektedirler. Onlara göre, okul dışı öğrenme, genellikle geleneksel olarak coğrafya, edebiyat, çevre, tarih gibi ayrı ayrı öğretilen konu alanlarında program içeriğini bütünleştirmektedir. Okul dışı öğrenme deneyimleri ile belirli konu alanları arasında açık bir ilişki bulunmaktadır; bununla birlikte, okul dışı öğrenme, içeriğin daha geniş beceri alanlarıyla bütünleştirilmesini sağlamaktadır. Beames ve diğerleri (2011), okul dışı öğrenmenin öğretim uygulamalarına entegrasyonu için ilköğretim düzeyinin daha uygun olduğunu, ortaöğretim bağlamında ise programın yoğunluğu ve başka baskılar nedeniyle disiplinlerarası çalışma potansiyelinin daha düşük olduğunu öne sürmektedirler. Dolayısıyla, ilköğretim düzeyinde okul dışı öğrenme disiplinlerarası kullanıma, ortaöğretim düzeyinde ise daha çok disipline özgü kullanıma uygundur. Christie ve Higgins (2012) okulda daha iyi bir başarı elde etmenin kişisel ve sosyal gelişimi sağlamanın okul dışı öğrenme ortamlarının etkililiğine kanıt olduğunu savunmaktadırlar. Benzer şekilde Çiçek Şentürk ve Saraç (2017), okul dışı öğrenme ortamlarındaki etkinliklerin fen derslerinde öğrenilen bilgilerin uygulanmasına izin verdiğini, bilim okuryazarı bireylerin yetiştirilmesine katkıda bulunduğunu ve bireysel farklılıklara uygun bir ortam görevi gördüklerini vurgulamaktadırlar.

Bu çalışmada öğrenme etkinlikleri açısından bu çalışmada, deneyler, keşif etkinlikleri, yaratıcılık etkinlikleri, hayal gücüne dayalı etkinlikler, iş birliğine dayalı etkinlikler ve gözlem görevleri yapmak amacıyla okul dışı öğrenme ortamlarının kullanılmasının uygun olduğu bulgusuna ulaşılmıştır. Cooper (2015) okul dışı öğrenme ortamlarının öz düzenlemeyi geliştirme, fiziksel zindeliği ve motor gelişimi ilerletme, konsantrasyonu iyileştirme, bilişsel gelişimi teşvik etme, akademik performans ve özgüven gibi pek çok faydası olduğunu ifade etmektedir. Benzer şekilde Topçu (2017) da okul dışı öğrenmelerin yaparak yaşayarak öğrenmeyi, akılda kalıcılığı, çoklu bakış açısını geliştirdiği, çevre ve insan etkileşimini desteklediğini belirtmektedirler. Okul dışı öğrenme deneyimlerinin okul öncesi dönemde etkili olduğu görülmektedir (Civelek & Özyılmaz Akamca, 2018; Yıldırım & Özyılmaz Akamca, 2017). Yıldırım ve Özyılmaz Akamca (2017) yaptıkları çalışmada okul öncesi dönemde olan 6 yaş çocuklarının okul dışı ortamlarda on haftalık deneyimler yaşamaları sonucunda kontrol grubundakilere göre bilişsel, dilsel, sosyo-duygusal ve motor becerilerde anlamlı derecede daha fazla gelişim göstermişlerdir. Bu beceriler Milli Eğitim Bakanlığı'nın Okul Öncesi Eğitimi programının gelişim hedefleri arasında yer almaktadır. Benzer şekilde,

Weinstein, Przybylski ve Ryan'ın (2009) araştırma bulgularında okul dışında yaşanan deneyimlerin stresi azalttığını, çocuklarda duygusal ve sosyal gelişimi desteklediği ifade edilmiştir. Yıldırım ve Özyılmaz Akamca (2017) okul dışı ortamlarının öğrencilere uygulayarak ve deneyimleyerek yapma fırsatı sunduğunu, öğrendikleri içerikle doğrudan etkileşime izin verdiğini belirtmektedirler. Öğretmenlere düşen sorumluluk ise bilginin doğrudan aktarımı yerine, öğrenenlerin bilgiye erişim becerilerinin desteklenmesi, içerisinde öğrenenlerin meraklarının tatmin edildiği, fikirlerin serbestçe ifade edildiği ve neden-sonuç ilişkilerinin kurulduğu bir eğitim ortamı tasarlamaktır. James ve Williams (2017), ortaokul öğrencileri, öğretmenler ve öğretmen adayları için okul temelli okul dışı öğrenme deneyimlerine vurgu yapmakta, okul dışı öğrenmelerde akılda kalıcı şekilde anlamlı öğrenmeye, öğrenenleri fiziksel olarak aktif hale getirmeye, onlara gerçek yaşama dayalı ve bağlamsallaştırılmış öğrenme olanakları sunmaya ihtiyaç olduğunu belirtmektedirler. Bu nedenle, okul temelli okul dışı deneyimler tartışmasız bir gerekliliktir; ancak, esas olarak test/çoktan seçmeli ölçme temelli olan mevcut eğitim anlayışında öğretim programının bir parçası olabilme olasılığı sıklıkla göz ardı edilmektedir (James & Williams, 2017). Sahrakhiz, Harring ve Witte (2018) çalışmalarında Almanya'daki okul dışı ortamlardaki öğrenmeleri çocukların bakış açısından incelemektedirler. Oyun, hareket etme ve sosyallik ve iş birliği gibi çocuk etkinlikleri açısından okul dışı öğrenmelerin potansiyeline odaklanmaktadırlar. Çalışmada, okul dışı öğrenmelerin öğretim, oyun, keşif ve deneyim fırsatları sunduğunu ortaya konulmuştur. Ayrıca, okul dışı ortamlar çocukların fiziksel, bilişsel, algısal ve sosyal olarak kendilerini zorlayarak sosyal çevreleriyle daha iyi bir ilişki kurmaya teşvik etmektedir; fakat okul dışı öğrenmenin başarısı, öğretmen tarafından yapılandırılmış ve formal olmayan öğrenme süreçlerinin iyi dengelenmiş kombinasyonuna bağlıdır. Avan, Gülgün, Yılmaz ve Doğanay (2019) 7.ve 8. Sınıfta öğrenim gören 45 gönüllü öğrenci üzerinde gerçekleştiği çalışmada STEM eğitiminde okul dışı öğrenme ortamlarını kullanmıştır. Öğrencilerin etkinlikler sonrasında bilimsel süreç becerilerini kullanma, astronomiye yönelik ilginin artması, eleştirel düşünme ve problem çözme becerisinde gelişme gösterdikleri belirlenmiştir.

Bu araştırmadan elde edilen bulgular, okul dışı öğrenmeyi kolaylaştıran veya risk oluşturan çeşitli faktörleri de ortaya çıkarmaktadır. Öğretmen adaylarının görüşüne göre, bu faktörler, öğretmenlerin okul dışı öğrenmeye ilişkin profesyonellik düzeyleri, öğrencilerin öğrenme ortamındaki fiziksel ve duygusal rahatlığı, örgütsel destek ve okul dışı öğrenme ortamının uzaklığıdır. Dillon ve diğerleri (2006) okul dışı öğrenmeyi öğretim programının bir parçası haline getirmekte yaşanan birtakım zorluklara değinmektedir. Onlara göre okul dışı öğrenmelerin gerçekleşmesini etkileyen faktörler arasında sağlık ve güvenlik konusunda korku ve endişe, öğretmenlerin okul dışında öğretim yapma konusunda güven eksikliği, okul programının zorunlulukları, zaman, kaynaklar ve destek eksikliği yer almaktadır. Benzer şekilde, Ernst ve Tornabene (2012) okul dışı ortamlarını kullanmanın en güçlü yordayıcılarını bu dış mekân ortamlarını kullanmada algılanan zorluklar, katılımcıların doğa ile ilgili olma düzeyleri ve öğrencilerin gelişimi için doğanın önemini anlamada güçlük olarak sıralamıştır. Bununla birlikte, güvenlik endişeleri ve doğal ortamlara erişim sorunu gibi okul dışı ortamların etkin kullanımını engelleyen birtakım engeller bulunmaktadır. Okul dışı öğrenmenin resmi okul programlarıyla bütünleştirilmesi, sınıfta öğretime kıyasla daha fazla zaman ve çaba gerektirmektedir. Sınıf gezisinin ötesine geçmek ve etkili bir öğretime ulaşmak için, okul dışı

öğrenme deneyimleri ile öğretim programının içeriği, öğrenci merkezli bir şekilde ve öğretim hedeflerine dayalı etkinliklerle ilişkilendirilmelidir.

SONUÇ

Bu çalışmada, eğitim fakültesinde meslek seçmeli dersine katılan öğretmen adayları için okul dışı öğrenme deneyimleri tasarlanmıştır. Bulgular, okul dışında öğrenmenin etkililiğinin iyi tasarlanmış bir plana bağlı olduğunu göstermektedir. Ayrıca, okul dışı öğrenme ortamları heyecan verici, akılda kalıcı olmalı ve çeşitli duyuları meşgul ederken zengin bir öğrenme içermelidir. Okul dışı öğrenme ortamı olarak öğretmen adaylarının; müzeler, bilim merkezleri, milli parklar, sanat galerileri ve sanatçı stüdyolarına daha fazla aşina iken; planetaryumlar, botanik bahçeleri, tarihi yerler, endüstri, medya gibi iş yerleri ve son olarak doğanın kendisine daha az aşina oldukları görülmektedir. Bulgular ayrıca deney yapma, keşif görevleri, yaratıcılık etkinlikleri, hayal gücü etkinlikleri, iş birliğine dayalı etkinlikler, gözlem etkinlikleri ve yansıtma etkinlikleri gibi öğrenme etkinliklerinin okul dışı öğrenmede gerçekleştirilmeye daha uygun olduğunu göstermektedir. Bununla birlikte, öğretmen adayları bu tür öğrenme deneyimlerini uygularken yaşanan zorlukları; okul dışı öğrenme konusunda öğretmenlerin profesyonellik düzeyinin, öğrencilerin öğrenme ortamındaki fiziksel ve duygusal rahatlığının, örgütsel desteğin ve okul dışı öğrenme ortamının mesafesinin belirlediğini belirtmektedirler. Okul dışı öğrenmede kalite standartları karşılandıktan sonra, üç alanda olumlu sonuçları olduğu görülmektedir: kişisel gelişim, sosyal gelişim ve okulla ilgili gelişim. Okulla ilgili gelişim; okula uyum, esnek öğrenme/esnek program, aktif katılım, derse uyum, içeriğe odaklanma, eleştirel düşünme, gerçek yaşama dayalı öğrenme deneyimleri ve bağlamsal öğrenmeyi kapsamaktadır. İkinci olarak, sosyal gelişim; çevreye saygı, bağlılık, sosyal etkileşim, sosyal sorumluluk duygusu, dış mekan liderliğini kapsamakta; ve son olarak kişisel gelişim ise daha fazla güven duygusu, özerklik, motivasyon ve merak kavramlarını içermektedir. Ek olarak, veriler, okul dışı öğrenmenin en sık görülen faydalarının gerçek yaşama dayalı öğrenme deneyimleri, esnek öğrenme/ esnek program, okula uyum, merak, bağlamsal öğrenme ve çevreye saygıyı içerdiğini göstermektedir. Özetlemek gerekirse, bu çalışma okul dışı öğrenme için bir çerçeve geliştirmekte ve resmi programın bir parçası olarak okul dışı ortamlarda belirli öğrenme tasarımlarını göstermektedir. Öğretmen adaylarının bu okul dışı öğrenme deneyimleri, onlara sınıf ortamında gerçekleştirme şansı düşük olan, dışarıda öğrenme ile ilk elden etkileşime girme fırsatları sağlamaktadır.

ÖNERİLER

Elde edilen sonuçlar doğrultusunda, eğitim ve öğretimin etkililiğini artırmak için okulların sadece kendi kaynaklarına bağlı kalmaktan ziyade toplumun kaynaklarını da (toplumda var olan okul dışı mekanları) kullanması önerilmektedir. Bu, öğrencilerin içerik bilgilerini genişletmeleri için iyi bir başlangıç olabilecek, kendi öğrenme stillerini ve hızlarını takip etmelerini teşvik edecektir. Bir yandan yöneticilerin, öğretmenlerin ve öğrencilerin endişelerini göz önünde bulundururken, bir yandan da sınıf-içi öğretimin sınırlamalarının ötesine geçmek ve eğitim hedeflerine ulaşmak için okul dışı öğrenmeyi resmi programın bir parçası haline getirmek amaçlanmalıdır. Bu araştırmanın sonucuna göre, belirli okul dışı öğrenme ortamlarının öğretim amaçlı tasarlanması hakkında sonraki araştırmalar için aşağıdaki önerilerde bulunulabilir.

- Resmi öğretim programına okul dışı öğrenme ortamlarının entegre edilme süreciyle ilgili ilke ve kılavuzlar geliştirilebilir.
- Öğrenme etkinlikleri açısından deneyler, keşif etkinlikleri, yaratıcılık etkinlikleri, hayal gücüne dayalı etkinlikler, iş birliğine dayalı etkinlikler ve gözlem görevleri yapmak amacıyla okul dışı öğrenme ortamlarının kullanılması önerilmektedir.
- İlköğretim, ortaöğretim ve yükseköğretim sistemlerinde öğretim programlarının bir parçası olarak okul dışı öğrenmelerin dahil edilmesi program geliştirme çalışmaları kapsamında önerilmektedir.
- Öğretim programına dahil edilmiş okul dışı öğrenmelerin etkililiği farklı yaş grupları ile ölçülüp değerlendirilebilir.
- Okul dışı öğrenme ortamlarında etkinlik sürecinde ve etkinlik sonrasında farklı ölçme ve değerlendirme yöntemleri üzerine araştırmalar yapılabilir.
- Son olarak, mekan temelli eğitim ve orman anaokulları gibi okul dışı öğrenme kapsamında değerlendirilebilecek otantik uygulamaların akademik becerilere etkisi konusunda deneysel çalışmalar yapılabilir.

ETİK METNİ

Bu makalede dergi yazım kurallarına, yayın ilkelerine, araştırma ve yayın etiği kurallarına, dergi etik kurallarına uyulmuştur. Makale ile ilgili doğabilecek her türlü ihlallerde sorumluluk yazarlara aittir.

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