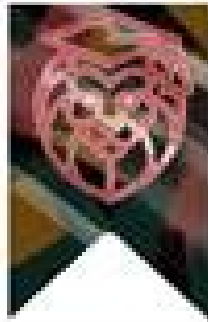


ALABAMA HBCU CONSORTIUM

ALABAMA HBCU Consortium

The Alabama HBCU Consortium
Fiscal Year 2022 - 2023 Report
Respectfully Submitted to the
Alabama Commission on Higher Education
November 6, 2023



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Introduction – Empowering Excellence in Education

We are delighted to present the 2022 - 2023 Annual Report of the Alabama Historically Black Colleges and Universities (HBCU) Consortium. It is with immense pride and gratitude that we share our accomplishments, challenges, and progress in furthering our mission under the legislation which created the Alabama HBCU Consortium i.e. “expending funds to be used to enhance the institutional sustainability of the Alabama HBCUs.” The Consortium continues to facilitate the role of advancing education and opportunities within our diverse and vibrant community.

It’s important that we acknowledge that our work currently and continues forward closely aligning with that of the Alabama Commission on Higher Education and the Alabama Community College System as it pertains to

- ✚ Encouraging HBCU and HBCC graduates to remain and work in Alabama
- ✚ Aid our HBCU institutions to provide and grow work based learning and a variety of experiential learning opportunities within the institutions
- ✚ Create innovative professional development and research opportunities within and between HBCU institutions
- ✚ And at our core fund projects which demonstrate collaboration, student growth and improved graduation and success rates at all of our HBCUs.

In the heart of Alabama, our Consortium unites a constellation of historically black institutions of higher learning, each with a unique history, yet all with a shared commitment to academic excellence, equity, and inclusivity. Our collective dedication to empowering students, enriching communities, and driving positive societal change has been unwavering throughout this year.

Within the pages of this report, you will find a comprehensive overview of the initiatives, achievements, and projects which have defined our journey over the past year. From bolstering educational access to promoting innovation in teaching, job analysis, strategic planning – institutional assessment and research, our Consortium has remained steadfast in its pursuit of fostering an inclusive and enriching learning environment among all our participating institutions.

Throughout FY 2022 – 2023 [October to September], we have encountered unprecedented challenges that have required us to adapt, innovate, and display remarkable resilience including a change to the Consortium’s funding structure. The year's events have demonstrated that our commitment to education is more critical than ever, and we are inspired by the tireless efforts of the faculty, staff, students, and organizational partners who have risen to the occasion to provide recommendations for projects and needed assistance to the Consortium.

In the following sections, you will discover the core elements of our Annual Report, including:

Overview of Achievements: A summary of key milestones, accomplishments, and initiatives that have shaped the progress of our Consortium including:

- ✓ **Academic Excellence:** Insights into academic programs, student successes, faculty achievements, and research advancements across our member institutions.
- ✓ **Community Engagement:** A glimpse into our outreach, community partnerships, and the impact our institutions have had on the broader Alabama community.

Current Programs, Projects and Initiatives: A description of the implemented and about to be initiated Consortium projects including the individuals assigned to act as the liaison for each, the strategic priorities, and the direction each project is designed to address.

Future Goals and Initiatives: A preview of our vision for the upcoming year, our strategic priorities, and the direction we aim to chart

We extend our heartfelt thanks to all the dedicated individuals, partners, and supporters who have contributed to the success of the Alabama HBCU Consortium. Your commitment and unwavering support have been integral to our continued growth and success.

As we reflect on the past year's challenges and triumphs, we remain resolute in our mission to provide access to quality education, promote equity, and inspire future generations. Together, we will continue to shape a brighter future for our students, our institutions, and our community.

Thank you for your trust, support, and shared dedication to excellence.

Overview of Achievements: A summary of key milestones, accomplishments, and initiatives that have shaped the progress of our Consortium.

Prior to the hiring of our current Executive Director in February of 2023, the Alabama HBCU Consortium Board of Directors engaged in meetings and fact finding left open from the previous Executive Directors explorations and institutional visits. It was ascertained that an immediate need for professional development for faculty and staff was seen as a task that the Consortium should engage both in the short and long term. Areas like incorporating internships, apprenticeships and other work-based learning opportunities for students within courses, credential and degree programs; collegiality between institution and within the framework of departments in order to enhance student growth and development; training in the techniques and strategies designed for faculty who provide training for students to improvement their passage rate on key test and certification instruments e.g., Praxis; CPA; LSAT; and other key professional certifications and entrance instruments.

It has been observed that Alabama HBCU institutions have a critical need to collaborate when it comes to sustaining and growing enrollment at both the undergraduate and graduate school levels and improve student data collection as well as student data usage to drive improvements and innovations, which the Consortium can facilitate. Working together for the common interest of all HBCU institutions has been adopted by the Consortium as a critical step toward continued sustainability for all in state HBCUs.

- ✓ **Academic Excellence:** Insights into academic programs, student successes, faculty achievements, and research advancements across our member institutions.
- ✓ **Community Engagement:** A glimpse into our outreach, community partnerships, and the impact our institutions have had on the broader Alabama community.

Immediately upon his arrival the current Executive Director, Dr. Michael A. Walker-Jones, began investigating the use and utility of the “Riipen System” through Mr. Josh Mitchel the VP of Academic Partnerships.

TRELLIS

Since August of 2023 the Consortium has started to establish a working relationship with TRELLIS. Having been brought together by another TRELLIS partner, the Alabama Commission on Higher Education (ACHE), the Consortium monitors and contributes to the relationship and work of TRELLIS among the Alabama HBCUs, the Predominately Black Institutions (PBI) and Minority Serving Institution (MSI). Ms. Thresa Tyus, MBA, AFC, Institutional Support Consultant for TRELLIS and Bryan Ashton, Chief Strategy and Growth Officer for TRELLIS have agreed to serve as contacts with the Consortium as we build a lasting relationship.

TRELLIS services include several elements which are key to the Consortiums mission and goals:

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- Direct Student communications (on behalf of the institution) to help them start college, stay in college, or return after stopping-out.
- Default prevention as part of an outreach to students with past-due federal student loans to assist them with successful repayment management.
- Research on behalf of the institution to help them understand student enrollment, retention, and student satisfaction.
- Consulting on student enrolment and retention management, customer satisfaction, advising, and other topics to help colleges better retain students.
- Training of staff on customer service, FAFSA, student advising, and other topics related to student experience and success.

Since TRELIS is a function supported by the US Department of Education it will be a critical function of the Consortium to facilitate a strong relationship between TRELIS and the Alabama HBCUs and PBIs. The Consortium should foster activities which seek additional funds and resources in order to increased services similar to those provided by TRELIS and the USDOE.

Here is a listing of institutions working with TRELIS and constituents of the Alabama HBCU Consortium:

Alabama A & M University, Alabama State University, Bishop State Community College, J. F. Drake State Community and Technical College, Lawson State Community College, Miles College, Oakwood University, Stillman College, Talladega college, Trenholm State Community College, Tuskegee University and University of West Alabama.

RiiPEN

Immediately upon his arrival the current Executive Director, Dr. Michael A. Walker-Jones, began investigating the use and utility of the “RiiPEN System” through Mr. Josh Mitchel the VP of Academic Partnerships for Riipen.

The program integrates course based experiential learning with real world employers who in some cases fund the work of the students or direct innovative intern or externships for student cohorts. Albeit, ultimately it was determined that the software was too costly and lacking key student data safe guards needed by our institutions, the concept of providing a portal for collaboration between institutions and employers in Alabama is a viable strateg worthy of research and possible pursuit.

Governor’s Office of Education and Workforce Transformation (GOEWT)

The Consortium has a relationship with the Governor’s Office of Education and Workforce Transformation (GOEWT) and Mr. Nick Moore, the Govenor’s head of the initiative. The GOEWT initiative is charged with three goals:

1. To increase the labor force participation and decrease the unemployment and underemployment rates;
2. To surpass the Alabama post-secondary attainment goal and;

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3. To create career pathways in all 16 career clusters for in-school youth, out-of-school youth, adults, and disconnected populations.

As a part of our Developing A Curriculum (DACUM) project Mr. Nick Moore has helped promote the DACUM project throughout the state. Specifically, the Consortium is working with Mr. Greg DiDonato, who is Vice President of EBSCO and is the lead developer of the Alabama Talent Triad. As partners in this endeavor we are continually trying to ascertain how the respective completed DACUM charts can be incorporated into the public facing website. (see attachment to this report as an example.)

The GOEWT has been assigned three objectives to achieve the three goals stated above:

1. Braid Alabama's federal education and workforce development funding streams to support an education-to-workforce pipeline;
2. Create and manage the Alabama Terminal for Linking and Analyzing Statistics (ATLAS) on Career Pathways and;
3. Create the Alabama Industry-Recognized and Registered Apprenticeship Program (AIRRAP)

The Consortium is poised to assist our HBCUs to explore and develop registered Apprenticeship programs at every level of each respective institution. Working with the Alabama Office of Apprenticeship lead by Mr. Josh Laney, the Consortium is uniquely positioned to aid in the research of employers who are willing to provide apprenticeship positions in partnership with Alabama HBCUs.

It stands to reason that the Consortium can represent the interest of all Alabama four year HBCUs as opposed to each individual institution. During FY 22 – 23 institutions like Miles College, Tuskegee, and Stillman commented to the Consortium Executive Director about the refreshing nature of working alongside the public HBCUs like AAMU and ASU. In some instances it was revealed that it was the first time private institutions became aware of projects and initiatives sponsored by ACHE had come to their attention. The Consortium takes great pride in the extra-ordinary skills and abilities of the organization to assist both the public and private HBCUs and PBI institutions of Alabama.

Complete College America

The Consortium has discovered through Dr. Carrie Hodge, Data Analyst, and Nikolas Huot, Assistant Vice President for Institutional Transformation both with Complete College America that the Consortium should submit a simple proposal describing how our organization facilitates the working relationship between the Alabama HBCUs and the Alabama HBCCs.

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BEST and BRIGHTEST – Decatur

Working with a variety of community based and non-governmental organizations (NGO) the Consortium has established a very important relationship with Mr. John Jacobs and the Best and Brightest organization in Decatur, Alabama. Since February of 2023 the Consortium has provided diversity and inclusion advice to the program as well as assisted the Best and the Brightest organization establish a working and recruitment relationship with several HBCUs and HBCCs.

The Consortium and Best and Brightest relationship has at its core three of the Consortium's priority agenda items:

1. Help the Alabama HBCUs to encourage graduates to remain in Alabama
2. Build strong business and institutional partnerships
3. Assist HBCU graduates to secure employment and experiential learning experiences.

The Best and Brightest organization partnered with the Consortium to receive valuable aid in their organizational growth and development. In September of 2023 Mr. Jacobs and several of his staff participated as expert contributors during two days of the five day Developing A Curriculum [DACUM] facilitator training. Four of the trainees took the Best and Brightest leadership team through an organizational/program analysis for two day. The results of this effort and the analysis for the Best and Brightest program will continue from October 2023 until March 2024 and possibly beyond.

Developing A Curriculum - DACUM

Bolstered by the two and one-half years of work by the Alabama Commission on Higher Education, the Alabama HBCU Consortium has brought to fruition the training of sixteen (16) DACUM facilitators. ACHE sponsored a live DACUM demonstration at the University of Alabama in February. Alabama Agricultural and Mechanical University (AAMU), University of Alabama, Alabama State University, University of West Alabama, Jacksonville State University, and Troy University participated in the simulated training and instruction as three local Information Technology directors served as the expert work-force panel.

The results of the demonstration came in the form of a recommendation by the investigative team to the ACHE Education Work Force Advisory Group. The ACHE investigative team stated in part of their report, that the DACUM process could fill a critical need and assist agencies and employers to develop close to real time accurate job/program/curriculum/and evaluative analysis.

The Consortium has established a strong partnership with ACHE and ACCS designed to promote and utilize DACUM along the following lines:

+ Curriculum Development & Training + Management Decision-Making + Human Resources & Organizational Development + Career Advising & Counseling + Assessment & Testing + Certification & Licensing

While DACUM is a structured analysis process, it is flexible enough to be a highly effective technique for identifying the duties and tasks across a wide variety of applications. Five major uses of the DACUM process are:

- ✚ Job Analysis
- ✚ Occupational Analysis
- ✚ Process Analysis
- ✚ Functional Analysis
- ✚ Conceptual Analysis

The trained facilitators, ACHE DACUM Coordinator, Ms. Lakeril Gill, and the ACCS DACUM Coordinator will develop a marketing and availability schedule which can be used to present the availability, uses, and utility of the DACUM process. Opportunities to present exist at the Regional Work-Force Council meetings, ACCS Council of Presidents, GOEWT Advisor Committee Meetings, ACHE Commission meetings, ACHE Education Work-Force Advisory Committee, ACHE Councils meetings (Presidents, Provost, Deans, etc.), Department of Commerce and Alabama Office of Apprenticeship meetings and several other agencies and employer groups.

Consortium Convenings – Research – Learning and Project Based Meetings

The Consortium operates in the context of a simple construct – be financial cost effective; provide a conduit for information relevant to faculty, administration and staff within our Alabama HBCU institutions; allow institutions to assess if projects promoted by the consortium meet the needs of the respective institutions or provide an opportunity for institutional advancement; and finally, seek a commitment from each participating institution in the form of either a memorandum of understanding (MOU) or a combined MOU and Scope of Work (SOW) agreement.

During the last FY the consortium held eight ½ day convening events covering the following topics:

1. The DACUM project
2. Using the Arts as a teaching methodology to promote Science, technology, engineering, and mathematics learning
3. Experiential Learning and work-force classroom inclusion - **Riipen**
 - a. Professional Development
 - b. Classroom / Employer partnership
 - c. Registered Apprenticeships
4. Strategic Planning and Faculty Professional Development
5. Social Work – Passage of certification examinations – methods to increase minority inclusion in the profession
6. Education and certification rates – passage of Praxis as well as increasing minority inclusion in the profession
7. Student Engagement Data and Analytics (SEDA) HUB – ASU Project
8. Governor’s Office of Education and Workforce Transformation (GOEWT)

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- a. Alabama “ATLAS” Alabama Terminal for Linking and Analyzing Statistics (ATLAS) on Career Pathways as part of our work with the Governor’s Office of Education and Workforce Transformation (GOEWT).
- b. Alabama work-force TRIAD – Mr. Greg DiDonato, who is Vice President of EBSCO and is the lead developer of the Alabama Talent Triad.

Approximately 80% of the Alabama HBCUs and HBCCs attended four or more of these convenings. The Consortium established the convenings as an effective means for presenting project, research, and collaboration opportunities and this must continue as an ongoing strategy.

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Current Programs, Projects and Initiatives

Alabama State University - Student Engagement Data and Analytics (SEDA)

The Student Engagement Data and Analytics (SEDA) Hub implementation aims to enhance a campus-wide culture of data-informed decision-making by offering customizable analytics. The expected results of implementing the SEDA Hub beginning in January of 2024 are as follows:

1. Establish a centralized data warehouse to gather data from at least three sources. To gauge its effectiveness, we must connect it to business intelligence tools, enabling us to quickly generate reports, run queries, and analyze analytic dashboards. This process is neither quick nor intuitive—metrics: creating data analytic dashboards and employee usage rates for these dashboards.
2. Foster a culture that values data using analytic dashboards to enhance student engagement and success, contributing to increased enrollment and retention. We can assess the effectiveness of the SEDA Hub by comparing enrollment and retention rates before and after its implementation—metrics: student enrollment numbers and retention rates.
3. Provide a demonstration component wherein Alabama HBCUs and community colleges in Alabama consider using the ASU SEDA Hub as a prototype or model to establish and effectively utilize a comparable data architecture. Implementing SEDA-style hubs within their respective institutions and community colleges. This will favor and project a “rising tide raises all boats” outcome.
4. Metrics and Information sessions, sponsored by the Alabama HBCU Consortium, will be provided to all participating Alabama HBCU’s and HBCC’s. ASU will have a designated means to respond to inquiries and provide support to participating institutions.
5. The Alabama HBCU Consortium and ASU will encourage and assist where practical each participating institution to seek funding for their respective implementation efforts from independent foundations, United States Department of Education, the Alabama State Legislature, the Governor of Alabama, and state and local business partners.

Alabama State University (ASU) is the oldest historically Black college or university (HBCU) in Alabama. Located in Montgomery, AL, the birthplace of the Civil Rights Movement, ASU is committed to social justice and providing excellent teaching and service to its student body of approximately 4,000 individuals. Of those students, 90% are Black or of African descent, and 75% are eligible for Pell Grants due to their families' limited financial resources. Additionally, at least 33% of undergraduate students are the first in their families to attend college. Despite these challenges, ASU is dedicated to supporting its students, helping them to achieve successful degree completion, and cultivating skills and qualities that will prepare them for future success in industry, professional or graduate school, and service.

The SEDA project is lead by Dr. Damian Clarke and Ms. Bryn Bakoyema with Mr. Patrick Kelly serving as the HBCU Consortium and ACHE liaison. The ASU administrative leadership team through President Dr. Quinton Ross, and Provost Dr. Carl Pettis, are committed to overcoming

the long history of institutionalized discrimination that has limited its financial resources and institutional capacity.

Institution wide, ASU staff, faculty and administrators understand that implementing the SEDA Hub requires technical expertise and a focus on supporting the people involved. However, securing dedicated time from project leads and users can be challenging due to their many responsibilities and competing priorities. Dr. Clarke has committed to integrate a change management strategy alongside their technical project plan to overcome this. This involves a dependency of executive support to prioritize this work, building awareness, demonstrating meaningful use cases, enhancing technical skills, and creating accountability measures to support usage.

ASU has initiated a data infrastructure processes and analytics usage has initiated an ingrained fabric of operations in order to guarantee the longevity of this project. ASU will work towards providing ongoing employment for staff members who possess the skills necessary to maintain, build, and facilitate the use of the SEDA Hub. ASU sees the evolution of the SEDA Hub as the data source for an AI engine to help create hyper-personalized learning opportunities administrative and operational efficiencies. The Consortium is using this commitment as a platform to encourage other HBCU institutions to follow the ASU example, study their implementation process, and make a determination if this “Leapfrog” project has merit for their institution.

ASU is a member of the Alabama HBCU Consortium, and working with the Alabama Commission on Higher Education this collaboration will help to enhance and document student's educational outcomes and advance the mission of these institutions as each respective institution scrutinizes the application of a SEDA project for again for their institution.

The collaboration between ACHE and the Consortium will allow ASU to demonstrate the practice and implementation of the project to all of the interested Alabama HBCU’s. Several HBCUs in Alabama also function as community colleges, which presents an excellent opportunity to promote SEDA to all community colleges in the state through the Alabama Community College System.

Strategic Planning – Selma University – Setting a Viable Future Direction

Strategic planning is a crucial process for universities because it helps them achieve their long-term goals and adapt to changing circumstances effectively. Here are several ways in which strategic planning benefits a university:

1. **Clear Direction and Vision:** It provides a clear sense of direction for the university, outlining its vision, mission, and core values. This clarity helps in decision-making and aligning all activities with the university's overarching goals.

2. **Goal Setting:** Universities can set specific, measurable, achievable, relevant, and time-bound (SMART) goals. This ensures that efforts are concentrated on achieving tangible outcomes.
3. **Resource Allocation:** Strategic planning helps in allocating resources, including finances, personnel, and facilities, in a way that supports the institution's priorities. It ensures that resources are used efficiently and effectively.
4. **Improving Student Outcomes:** By identifying specific educational objectives and strategies, universities can enhance the quality of education and student learning outcomes.
5. **Adaptation to Changing Needs:** As the educational landscape evolves, strategic planning allows universities to adapt and stay relevant. They can respond to changes in demographics, technological advancements, and industry demands.
6. **Enhanced Reputation:** A well-executed strategic plan can improve a university's reputation. It can attract high-quality faculty and students, as well as increase support from donors and stakeholders.
7. **Innovation and Research:** It encourages a culture of innovation and research by defining research priorities, encouraging interdisciplinary collaborations, and securing funding for cutting-edge projects.
8. **Risk Management:** By identifying potential risks and challenges, universities can develop strategies to mitigate them. This proactive approach minimizes the impact of unforeseen events.
9. **Data-Driven Decision-Making:** Strategic planning often involves gathering and analyzing data, which allows universities to make informed decisions based on evidence rather than intuition.
10. **Engagement and Collaboration:** It fosters collaboration and engagement within the university community. Faculty, staff, students, and other stakeholders are more likely to be motivated and involved when they see their input is considered in the planning process.

Compliance and Accreditation: Many accrediting bodies require universities to have a strategic plan. Compliance with accreditation standards is essential for maintaining the institution's reputation and eligibility for federal funding.

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Long-Term Sustainability: It helps ensure the long-term sustainability of the institution by focusing on its financial health, infrastructure, and capacity to serve future generations of students.

In summary, strategic planning is a valuable tool for universities to set and achieve their goals, adapt to changing circumstances, enhance educational quality, and manage resources effectively. It enables universities to remain competitive and meet the needs of their stakeholders in an evolving educational landscape.

This description has critical significance for Selma University, an old established Alabama HBCU. Aiding an Alabama HBCU with sustainability is a core piece of the Alabama HBCU Consortium core mission, which is why the Consortium has committed funds to provide Selma University the ability to employ a recognized strategic plan expert consultant. The consultant will help President Dr. Stanford E. Angion, the faculty and staff to curate their current strategic plan into an updated vision of sustainability for the University.

Hypothetically, if Selma University were to face collapse, it would be the second catastrophic educational loss for the Selma community. Concordia College Alabama was a Private historically black college associated with the Lutheran Church–Missouri Synod and located in Selma, Alabama. It was the only historically black college among the ten colleges and universities in the Concordia University System. Concordia was founded -- as the Alabama Lutheran Academy -- in Selma in 1922. Rosa J. Young, known as "the mother of black Lutheranism in America," started the college.

It's important for those who cherish our Alabama HBCUs to understand what can happen when an institution like Selma University closes or leaves a community.

Economic Impact: Closing Selma University will result in the loss of jobs for faculty, staff, and supporting businesses. Selma University contributes to the local economy by employing local residents and attracting students who spend money in the community.

Educational Opportunities: Closing Selma University will eliminate educational opportunities for local and incoming students. It will limit access to higher education, forcing students to travel farther distances to pursue their degrees, or to rely strictly upon online education outlets, potentially reducing the number of individuals pursuing higher education overall.

Community Identity: Selma University without question is an integral part of the community's identity. Their presence has influenced the city's culture, social events, and engagement. Losing Selma University will impact the city's sense of pride and history and the regional faith-based community with the loss of a leadership pipeline.

Property Values and Real Estate: The closing of Selma University will impact the local real estate market. Properties previously rented or utilized by faculty and students might face decreased demand, affecting property values and rental prices.

Intellectual and Cultural Contributions: There's no doubt the Selma University continues to contribute to the intellectual and cultural vibrancy of Selma. The University host events, lectures, art exhibitions, and other activities that enrich the community's cultural landscape. Losing such contributions could leave a cultural void in the city.

Long-Term Development: Selma University must continue to play a role in fostering research, innovation, and development in the city and the region. The absence of this particular educational institution might slow down or hinder potential advancements and collaborations in various fields.

Please note that these impacts are speculative and can vary based on the specific circumstances, size, and influence of Selma University within the city of Selma, Alabama and the regional "Black Belt." This is why the Consortium is attempting to influence and mitigate as many factors as possible in order to help Selma University stave off closing due to an adverse financial outlook. It's important to keep in the forefront the impact of Selma University upon the state and the community, including the institution's history, community ties, and the efforts made to mitigate the effects of closure on the city and its residents.

Establishing Alabama HBCUs as Student Achievement Innovators – Using Art to Stimulate Science/Engineering/Mathematics/and Technology from pre-school to primary grades

Art can be a powerful tool for teaching scientific thinking, problem solving, and reasoning. This is because art and science share many common principles, such as observation, experimentation, analysis, and creativity.

One way in which art can be used to teach scientific thinking is through the process of observation. Artists often observe the world around them in great detail, paying attention to the shapes, colors, and textures of objects. This same process of observation is critical to scientific inquiry, as scientists must carefully observe and record data in order to draw accurate conclusions.

Another way in which art can be used to teach scientific thinking is through the process of experimentation. Artists often experiment with different materials, techniques, and styles in order to create new works of art. Similarly, scientists use experimentation to test hypotheses and gather data in order to gain a deeper understanding of the natural world.

Art can also help to teach problem solving and reasoning skills. Artists often face challenges and obstacles as they work on their projects, and they must use their creativity and critical thinking skills to find solutions. This same type of problem solving is essential in science, as scientists

must use their knowledge and analytical skills to solve complex problems and develop innovative solutions.

Overall, art can be a valuable tool for teaching scientific thinking, problem solving, and reasoning. By integrating art, technology, engineering and science education, we can help students develop a deeper understanding of both disciplines and foster a more holistic approach to learning.

Cognitive development refers to the process by which a child learns to reason, solve problems, think logically, and acquire knowledge about the world around them. It involves the growth and maturation of a child's mental abilities, including perception, memory, language, and reasoning skills.

Cognitive development is a gradual process that occurs throughout childhood and adolescence, and is influenced by a variety of factors, including genetics, environment, and experience. The study of cognitive development has been a major focus of research in developmental psychology, and has led to a better understanding of how children learn and grow.

Some of the key theories of cognitive development include Jean Piaget's theory of cognitive development, Lev Vygotsky's sociocultural theory, and the information processing approach and Jerome Bruner (1915-2016) an American psychologist who made significant contributions to the fields of cognitive psychology, education, and language acquisition. He is widely known for his work on cognitive development, including his theory of "scaffolding," which proposes that children can learn new concepts by building on what they already know [sometimes referred to as "cognitive framework", too.]

Bruner also emphasized the importance of storytelling and narrative in education and argued that the way information is presented can greatly impact learning. He believed that students learn better when they are actively engaged in the learning process and when they are encouraged to construct their own knowledge rather than simply memorizing facts.

These theories provide different perspectives on how children's cognitive abilities develop, and have influenced the way we think about teaching and learning in educational settings. Understanding cognitive development is important for parents, educators, and caregivers in order to provide appropriate support and stimulation to children as they grow and learn.

In addition to Piaget's stages, other theories of cognitive development have been proposed, including Lev Vygotsky's sociocultural theory, which emphasizes the role of social interaction and cultural context in cognitive development.

Overall, cognitive development is an important area of study for understanding how children and adolescents learn, think, and problem-solve, and for developing effective educational interventions and strategies.

Currently, the Alabama HBCU Consortium has embarked on a professional development pathway designed to strategically place willing HBCU colleges and departments of education in a position to stand out as innovation incubators in the area of using “Art” as a teaching methodology to stimulate “Science, Technology, Engineering and Mathematics” cognitive growth in pre-schools to primary grade students. The Consortium has targeted preservice educators by training current faculty and teaching assistants in the process.

The Consortium is in the final stages of negotiating with an organization that has shown notable results in this process, the “Collaborations: Teachers and Artist” (CoTA) from San Diego California: <https://cotaprogram.org/>. Having a track record of over twenty-five years, an array of training programs directly on target and a research relationship with the University of California San Diego, Dr. Dennis Doyle and his cadre of staff, artist, and educators have already provided in-service professional development training for over twenty Alabama k-12 educators in the last three years. The Consortium has begun to take advantage of this relationship by securing the aid of CoTA and training HBCU faculty and Teaching Assistants in the up-coming semester and following summer.

Using the arts to teach scientific thinking is a creative and effective way to engage students in the scientific process. Here's how our HBCU institutions are poised to accomplish this:

Incorporate Art into Science Lessons:

Start by introducing artistic elements into your science lessons. For example, you can use drawings, paintings, or sculptures to represent scientific concepts. If you're teaching about cells, have students create artistic cell models.

Encourage Observation:

Art requires keen observation skills. Have students observe natural objects, organisms, or scientific phenomena closely. Ask them to sketch or paint what they see, paying attention to details.

Ask Questions:

Encourage students to ask questions about what they're observing. Why does a plant's leaf look a certain way? What might be the purpose of specific patterns in a rock? This fosters curiosity, a fundamental aspect of scientific thinking.

Analyze and Interpret:

After creating their art pieces or observations, have students analyze and interpret their work. What do they notice about the subject? How might this relate to scientific principles? This helps develop critical thinking skills.

Experimentation and Creativity:

Art often involves experimentation and creativity. Encourage students to try different techniques, colors, or materials. Similarly, in science, experimentation is key. Relate artistic experimentation to scientific experimentation.

Express Concepts Artistically:

Ask students to express scientific concepts artistically. For instance, they can create a visual representation of the water cycle or draw what they imagine atoms look like. This helps them internalize and understand scientific ideas.

Interdisciplinary Projects:

Plan interdisciplinary projects that combine art and science. For instance, students can create a mural that depicts various ecosystems and the organisms that inhabit them. This project would require research and scientific accuracy.

Storytelling Through Art:

Encourage students to tell stories through art. They can illustrate the life cycle of a butterfly, the journey of a water droplet, or the process of photosynthesis. This helps them connect scientific concepts in a narrative form.

Collaboration and Discussions:

Organize group discussions where students can explain their artistic interpretations. This not only promotes scientific thinking but also communication and peer learning.

Reflect and Connect:

At the end of art-science activities, have students reflect on how the creative process enhanced their understanding of scientific concepts. Discuss how artistic thinking and scientific thinking can complement each other.

By integrating the arts into science education, we will not only foster scientific thinking but also make the subject more engaging and accessible to a wider range of students. It encourages them to think creatively and critically about the natural world and its processes. This is especially helpful in under performing schools and within our most needy communities.

Developing A Curriculum for Alabama Job Analysis to Curriculum Development - DACUM

The Alabama HBCU Consortium contracted with the Center on Education and Training for Employment (CETE) at The Ohio State University (OSU), through its DACUM International Training Center, which has been providing DACUM services to clients world-wide since 1976. Conducting two training sessions, the first in the spring and the second in the fall of this year. The DACUM process has proven to be beneficial to many technical schools, community colleges, companies, and government agencies over fifty years of successfully developing DACUM facilitators. The DACUM process will provide Alabama colleges, organizations, and

agencies with a proven method for developing the foundation required for competency-based program curricula, program analysis and/or job analysis.

Partnering with the Alabama Commission on Higher Education and the Alabama Community College System we currently have 16 trained facilitators in the DACUM process.

1. Ms. Lakerri Gill – Specialist Alabama Commission on Higher Education/DACUM Coordinator
2. Dr. Abigail Carter – Assoc. Director of Computer Information Technology Instruction/DACUM Coordinator – Alabama Community College System
3. Ms. Natalie English – Executive Director of Career and Technical Education – Alabama Community College System
4. Dr. Levi Mayer – Assistant Dean of Instruction – Drake State Community and Technical College
5. Mrs. Kelly Williams – Division Chair of Applied Services/Cosmetology Instructor – Drake State Community and Technical College
6. Dr. Kathy Wells Edwards – Assist. Prof. Division of Business and Accounting – Miles College
7. Dr. Albert Russell – Assist. Provost for Academic Programs and Student Matters – Tuskegee University
8. Ms. Gena Robbins – Employer Relations Specialist – University of West Alabama
9. Ms. Bliss Adkison – Director of Institutional Effectiveness and Strategic Planning – University of West Alabama
10. Dr. Damita Hill – Executive Director of Workforce Development – Trenholm State Community College
11. Dr. Johanna Massey – Associate Dean for Liberal Arts and College Transfer & Interim Depart. Chair. – Alabama A & M University
12. Dr. Yvette Njan-Essounga – Assoc. Professor of Management and International Business – Tuskegee University
13. Dr. Karl Pruitt – Associate Dean, Liberal Arts – Lawson State Community College

14. Ms. Teresa Smiley – HBCU Co-Op Project Manager – Alabama Office of Minority Affairs

15. Dr. Lasharia Turner – Field Coordinator/Assistant Professor – Alabama A & M University

16. Ms. Angela Williams – Management Instructor/Division of Business and Accounting – Miles College

DACUM is based on three philosophical concepts:

Expert workers can describe and define their job/occupation more accurately than anyone else. Persons who are working full-time in their positions are the real experts on that job. Even though supervisors and managers usually know a lot about their subordinates' work, they usually lack the expertise needed for a high quality analysis.

An effective way to define a job/occupation is to precisely describe the tasks that expert workers perform. A successful worker performs a variety of tasks that either the customer or employer wants performed. Possessing positive attitudes and knowledge alone are not enough. Finding out what the expert workers do will give us the opportunity to prepare other experts.

All tasks, in order to be performed correctly, demand the use of certain knowledge and skills; tools, equipment, supplies, and materials; and positive worker behaviors. While the knowledge and skills, tools, equipment, supplies, materials and positive worker behaviors are not tasks, they are enablers which make it possible for the worker to be successful. Because these enablers are so important, considerable attention is given during the DACUM workshop to identifying lists of each. Because these attributes are different and distinct from the tasks, it is very important to keep them separate if a high quality analysis of job performance requirements is to be obtained.

DACUM has been used very effectively to analyze jobs and occupations at the professional, managerial, supervisory, technical, skilled, and semi-skilled levels. It has also been used effectively to conceptualize future jobs, and to analyze portions (selected duties or functions) of one's occupation. With the increasing emphasis on quality brought forth by the TQM (Total Quality Management), ISO 9000, and QS 9000 movements, DACUM also has been used widely as a basis or foundation for analyzing various industrial systems and processes.

The DACUM facilitation process is intended to be used immediately in Alabama as a method to help Alabama businesses, institutions, and government agencies with job analysis and curriculum development. Here's a brief working explanation:

- Get a Group of Experts: First, you gather a group of experts who understand a particular job or occupation really well. These experts could be people who are currently working in that job.

- Create a Chart: You draw a big chart on a board or paper. At the top, you write the job title you want to learn about, like "Electrician" or "Chef."
- List All the Tasks: The experts in the group start talking about all the things they do in that job. For example, an electrician might say they "install wires" or "fix electrical problems." Each of these tasks is listed on the chart.
- Group and Organize: You group similar tasks together. For example, tasks like "installing wires" and "connecting electrical components" might be grouped under "Electrical Installation."
- Decide on Importance: The experts then decide how important each task is. Some tasks are done more often or are more critical than others.
- Create a Profile: After discussing and organizing all the tasks, you end up with a profile of the job. This profile shows what tasks are important and what skills and knowledge are needed to do the job well.
- Use for Education and Training: This profile is very helpful for creating training programs, classes, or educational materials for people who want to learn that job. It ensures that they are learning the most important things.

In simple terms, the DACUM process is like making a big to-do list for a job with the help of experts (see attached example.) This list helps teachers and trainers know what to teach and helps students and workers understand what they need to learn to do the job right.

As part of our developing DACUM program and services, the coordinators and the DACUM facilitators will continue to convene and put together marketing, analysis materials and improve their training skills. Already the Consortium in tandem with ACHE has exposed the DACUM process to all of the Alabama public four year institutions, while the ACCS is in the process of setting up DACUM facilitation convening to analyze key technical and vocational programs at several of the states Technical and Community Colleges.

Working in pairs all 16 of the trained DACUM facilitators will be able to assist employers, institutions and agencies in the following types of DACUM Analysis:

Curriculum Development & Training

- ✓ Identify important job duties/tasks
- ✓ Basis for determining task importance/difficulty
- ✓ Establish job performance standards/assess training needs
- ✓ Foundation for competency-based curriculum/instructional materials development
- ✓ Basis for quality education/training programs

Management Decision-Making

- ✓ Re-design jobs to eliminate duplication/redundancy
- ✓ Determine task value added
- ✓ Establish standard operating procedures (SOPs)
- ✓ Input to Quality Planning (ISO/QS 9000)
- ✓ Process identification/improvement
- ✓ Conceptualize new/restructured jobs

Human Resources & Organizational Development

- ✓ Develop position-specific job descriptions
- ✓ Basis for job classifications
- ✓ Basis for employee compensation
- ✓ Basis for position-specific employee performance evaluations
- ✓ Basis for employee promotions/recognition

Career Advising & Counseling

- ✓ Assess candidate interest in job
- ✓ Assess candidate's present skills
- ✓ Advise employee on learning needs
- ✓ Advise employees on career planning

Assessment & Testing

- ✓ Assessment of employee knowledge
- ✓ Assessment of employee skills
- ✓ Assessment of employee work behaviors
- ✓ Selection testing
- ✓ Promotion testing

Certification & Licensing

- ✓ Identify job competencies required for professional certifications
- ✓ Certify trainee/worker competence
- ✓ License workers for trades/professions

While DACUM is a structured analysis process, it is flexible enough to be a highly effective technique for identifying the duties and tasks across a wide variety of applications. As part of our Alabama project are using all five of the major DACUM processes!

1. Job Analysis – DACUM was initially developed as a method of **Job Analysis**. Today, this process is in considerable demand by companies with many persons employed in the same job and want a solid basis for developing a curriculum and training program to prepare additional experts for the same job. Professional organizations and government agencies also use this job-specific analysis as a basis for curriculum

development, training, HR planning activities, management decision-making, career planning, employee testing, and certification.

2. Occupational Analysis – An **Occupational Analysis** is the best approach for organizations that want to analyze an occupational area rather than a single position. This approach is especially helpful for ACCS and the community and technical colleges as it typically results in educational programs that provide a broad preparation in the occupational area of career interest. An occupational analysis also informs the development of career ladders and lattices for an occupational field where one can enter employment after acquiring the entry-level knowledge, skills, and worker behaviors required.
3. Process Analysis – A **Process Analysis** is used to determine the work required to complete a given process involving workers with different job titles. For example, let's say Alabama Power company wants to know the tasks performed by a construction cost estimation team comprised of a manager, technicians, an accountant, and other support staff. Or a Alabama State University academic dean wants to know what the academic services unit is doing to meet the needs of students. This team is composed of a director, associate directors, graduate assistants, and support staff. The analysis provides a graphic picture of all the tasks that must be performed to successfully carry out the specified process.
4. Functional Analysis – A **Functional Analysis** is performed when several individuals perform an important function as part of their jobs. These individuals have many other job responsibilities but need to know how to perform their assessment or other designated function well. For example, during our first DACUM facilitator training several Alabama career and professional advisers were asked to analyze the assessment function of student advisers across numerous academic programs. These individuals have many other responsibilities in addition to testing but see assessment as an important function that must be done well. An analysis of the assessment function resulted in the identification of the duties and tasks associated with the work and informed the development possibilities of training programs which can prepare the advisers to perform this function correctly and efficiently.
5. Conceptual Analysis – A **Conceptual Analysis** is conducted when an organization wants to develop a new training program or position and is often used to identify the work associated with emerging industries, such as the technology and “green energy” sectors. During our second DACUM facilitator training this process was used to help “The Best and Brightest Program” from Decatur, Alabama. ACCS plans to help the community colleges interested in establishing a new certificate or associate degree program determine what should be included in the educational or training curriculum. The use of subject matter experts (SMEs) in related fields, particularly when the SMEs are local, helps develop an awareness of and support for the new



program that is extremely valuable to the college. Alabama companies can request this type of analysis when they want to create a new position or to restructure existing positions.

Summarizing, the Alabama HBCU Consortium's DACUM immediate goals can be stated in three understandable statements. First, the Consortium wants the DACUM process to be utilized because it is a powerful combination of being an effective, quick and low-cost process for doing localized research for curriculum development, managerial decision-making, process and program analysis and several other essential everyday business and academic functions.

Second, the DACUM process can contribute to the growth of career pathway mapping and cross-walks, help Alabama employers do more effective competency and skill evaluations plus build better job descriptions.

Third, the public relations value to Alabama educational institutions, agencies and businesses is a critical piece to helping businesses realize that our higher education institutions really wants to help them identify the competencies needed by workers in their field and for their respective businesses.

Future Goals and Initiatives: A preview of our vision for the upcoming year, our strategic priorities, and the direction we aim to chart

The Consortium takes great pride in our website <https://alhbcuconsortium.org/>. It's interactive and updated frequently. The fiscal year will see the Consortium motivate and fund institutional research and projects. As we move forward the web pages will not only provide information about all of the Alabama HBCUs and HBCCs, we will initiate the building of dashboards and factbooks which reflect up to date data points about each institution and or the Regional Workforce needs where the institution is located:

1. The consortium will fully utilize the work in partnership with ACHE currently being done on the Education and Workforce Needs Index (EWNI) to gauge the education and workforce strengths and challenges across the state, and where to focus policy attention for improvement going forward. The Education and Workforce Needs Index (EWNI) is a dynamic visual interface that enables users to access their states and regions to more easily identify key areas of success and challenge in developing education and workforce capital. The overall Index utilizes sixteen well-researched and field-tested measures combined into three categories: education, workforce, and population demand. The EWNI has been recently calibrated to provide additional focus on the education and workforce conditions of Alabama Black. The EWNI will provide additional focus to Consortium efforts designed to better serve the primary population of the Alabama HBCUs.

2. Student success and institutional outcomes. Will also include regularly updated data and information on the following:
 - Characteristics: Gender, Ethnicity, Age, etc.
 - Enrollment
 - Retention
 - Graduation rates
 - Certificates of value Completion rates
 - School to work and Employment data
 - Career Pathways specific to the institution
 - Work-based learning opportunities across the board for all HBCU programs and certification areas
3. Reports on STEM and the Arts preservice training program. Capitalizing on the work of Collaboration: Teachers and Artist and the previous research from the University of California San Diego the Consortium will seek and provide resources to spur academic research in the critical area.
4. The Consortium will continue to support efforts by faculty and institutional administrators to improve the certification, licensure and professional attainment rates in Education, Social Work, Accounting, pre law and pre medical students across the respective Alabama HBCUs.

The Consortium is committed to sustaining our ongoing programs such as the Using the Arts as a stimulus for motivating early-childhood learners in STEM; our utilization of DACUM as a developing tool for bringing Alabama employers, institutions and agencies in closer alignment with the training, certification and education of students and potential employees. In addition the Alabama State University SEDA project is a game changer for all of the HBCUs which participate in following the progress of the ASU implementation of this leap-frogging shift into the world of decision making and systems development based in an “Artificial Intelligence” structured environment.

In closing, an essential core value for any organization is to build trust, openness, and authentic relationships among its stakeholders and partners. The Alabama HBCU Consortium has a tireless work ethic in this regard. Alabama institutions have recognized that the Consortium has a valuable facilitation and unifying role to play. The Alabama HBCU’s have a wonderful opportunity for shared resources which could be explored via regular meetings among the presidents and their respective administrators, faculty, staff and students. The Consortium is the vehicle to help move that agenda.