Building Green Career Pathways

Guidance Documents:

• DC Career Technical Education 2020-23 State Plan

Accomplishments:

- Green Zone Environmental Program (GZEP) for summer youth employment
- Anacostia High School Redesign
 - In School
 - Project-Based Learning in Science/Engineering Classes
 - Tutoring and mentoring
 - Career Exploration Events
 - Out-of-School Time
 - Summer Youth Employment/Internships
 - Trips to Professional Events
 - Facilities
 - Outdoor Classroom
 - Rain gardens, native plants, mindfulness courtyard
 - Hydroponics Greenhouse
- <u>CTE High School Programs</u>
 - Coolidge HS offers Energy and Natural Resources
 - o Ron Brown College Prep HS offering Horticulture Science
 - Friendship Tech Prep Academy PCS offering Energy and Natural Resources Technology
 - HD Woodson Engineering Environmental Sustainability
- CTE Middle School Programs for 2022-24
 - Hardy MS and Johnson MS offering PLTW Green Architecture
 - Sojourner Truth PCS offers Urban Agriculture
 - Howard University MS PCS offers Agriculture, Food, and Natural Resources

Opportunities:

- <u>DC Futures Program</u> (OSSE/UDC)
- Drafting DC CTE 2024-27 State Plan
- CTE Advanced Internship Program hosting students with DOEE and UDC
- Department of Parks and Recreation's Youth Summit
- Including environmental sustainability in the DC CTE State Plan explicitly

Key Partnerships:

• Office of the State Superintendent of Education

- Department of Energy and Environment
- University of the District of Columbia
- Department of Parks and Recreation

Challenges:

- Not many high schools offer environmental programs of study. Possible challenges:
 - Instructional staff
 - Knowledge and training
 - Self-efficacy regarding conten

Major Funding Programs:

- Park Maintenance Grants
- GZEP
- Green Fellows

High-Impact Actions for Sustainable Schools

Guidance Documents:

- Chesapeake Bay Watershed Agreement Environmental Literacy Goal
- Sustainable DC 2.0
- DC Environmental Literacy Plan

Accomplishments:

- Capital LEAF resource hub
- US Green Ribbon School recognitions
- Alignment with outdoor learning initiative
- Net zero energy school projects (John Lewis ES and Banneker HS)

Opportunities:

- Modernization projects
- Master Facilities Plan update
- 2023 DC Environmental Literacy Plan update

Key Partnerships

- Department of General Services (DGS)
- Department of Energy and Environment (DOEE)

Challenges:

- Difficulty restarting DGS recycling and composting programs
- Students and teachers unaware of sustainability features at their school
- Not as much system-level support for public charter schools

Major Funding Programs:

- DOEE RiverSmart Schools (via DOEE Stormwater Fees for MS4 permit)
- EcoRise Eco-Audit grants (mini-grants for student projects)

Climate Change

State and/or National Guidance Documents (i.e. climate action plans, resilience and adaptation plans, or energy plans):

- Executive Order (white house)
- Sustainable DC

Accomplishments:

- DOEE Keep DC Cool strategies released in 2022
- DOEE Climate Ready DC

Opportunities for environmental literacy work to support climate action, resilience, or energy goals:

OSSE's <u>Healthy Schools grant</u>

Key Partnerships

- Department of Energy and Environment, Climate Ready DC
- Department of Energy and Environment, Keep DC Cool
- DDOT
- DGS
- DC Water
- WHO 2022 DC Health and Climate Change Urban Profile

Challenges:

• Slow movement into schools. NNS partners added air quality programming into the curriculum in 2022/23.

Major Funding Programs:

- Bipartisan Infrastructure Law
- Inflation Reduction Act

Student Environmental Literacy (MWEE)

Guidance Documents:

• 2022 ELIT Report - DC

Accomplishments:

- OSSE Capital LEAF program
- DOEE Overnight MWEE return
- DOEE Nature Near School MWEE
- DOEE Middle School MWEE

Opportunities:

• AREC offering teacher PD

Key Partnerships:

- OSSE
- DCPS
- NGO's
- DCEEC

Challenges:

- Funding from other District agencies
- Teacher PD

Major Funding Programs:

- Chesapeake Bay Implementation Grant
- Anacostia River Clean Up and Protection Fund

State Network Updates

DC Environmental Education Consortium (DCEEC):

- Restarted monthly meetings in January 2023
- Received capacity building grant from NAAEE to hire a contractor

For questions, please contact: Grace Manubay, OSSE: grace.manubay@dc.gov

NOTES from summit

Building Green Career Pathways

DC breakout discussion - Candace Mott, DC OSSE - facilitator

Where are opps to influence & support CTE or workforce (WF) programming -

- Resources such as IRA, BIL, Disability Education Act, etc.
- Coordinating w/ Workforce Investment Council & Deputy Mayor make sure diff parts of gov mesh
- Support high school NAF academies on environmental justice (National Academy Foundation = NAF)

CTE/NAF Academies

- CTE programs exist under Perkins
- Academy models from many years ago schools w/in schools started w/ business, IT, engineering, health science, other topic areas they provide support and implementation
- Have approved programs of study based on wage ... for DC area school district can propose program of study and it goes thru approval process.
- Energy & renewable resources, engineering w/ sustainability focus ppl gravitate to those thru EJ focus

Some current efforts outside of CTE

- OSSE Advanced Internship Program participants hosted at DOEE
- DOEE Working w/ UDC on courses & certificate programs to meet sustainability goals
- Friends of the National Arboretum used to have a summer program work w/ Career Readiness –
 not a perfect match engineering, health sciences, culinary one... not obvious how these match
 w/ envir't.
- Some programs work thruout school year doing this work need to connect better w/ them.
- Kingman Rangers summer program had been using summer employment program

What could better support if you had a WF or CTE wish list?

- Metrics for policies incl green job programs indicators and metrics
- Alignment of programs of study w/ what we can offer for interns
- Need to recruit own students bec it's so diff from what is traditionally available. So students end up with a good experience.
- A lot of little pockets of work w/in orgs and not all talking w/ each other

How improve the depth of info and awareness, beyond surface level info, so can be change agents?

- DOEE can bring in to do a lot of diff things they wouldn't think of eg IT, public speaking
- Need to be part of some of the onboarding, to make broader connections w/ diff partners. Connect those w/ envi't frame with those who don't.
- Start early, choosing the right folks to participate.
- Job progression tools for career coaching. Can take person who is a cashier and outline a number of gateways to other jobs bec of skills you possess as a cashier.
- If can't get early exposure, figure out how to make later exposure w/ available tools.
- Need awareness and a connection.
- Revising standards will be helpful principals/ educators more focused on things like attendance, discipline, etc. (have a lot to deal with), so putting it into what they have to do helps.
- Finding champions eg special areas teachers who can be cross-trained to start a club hard in DC. Support in DCPS is hard, the support comes bottom-up not top-down. Can't get teachers to come to PD, they're burnt out, ea school makes their own decisions doesn't come from LEA level.
- Relationships important! Things move w/ppl you know, trusted resource.

City setting has a lot of concrete – envi'l experience is difficult. How do you position ppl well and still have an equity lens. Early exposure to variations. Human-centered approach – help them unpack the skillset they possess and empower them to make decision around direction to go.

How to put more E-Lit in there, become part of a standard so all doing same thing.

- E-Lit part of the work hasn't been fleshed out as well as it should re the CTE stuff.
- What can/should E-Lit programming look like in existing CTE programming? Best practice

- If not in a program focused on the envi't, it might happen anecdotally ??
- Envi educators struggle to get teachers to participate, hard for DCPS to promote it.
- Project WILD teaches how to teach anything outside
- Friendship LEA took all of their teachers through the program

How do ppl get the info? Don't feel like info (eg the LEA puts out??) gets to its intended audience, gets lost. Might be embedded in a newsletter that ppl don't read all the way thru.

Transformational leadership – Donald mentioned on panel – who is that in DC?

Anacostia program can't get replicated at every school – not possible – they stick to hospitality, engineering, etc., bec it's what their teachers are comfortable with.

Consider on-ramps and off-ramps w/ jobs. Engineering w/ focus on envi sustainability, for example – bec tends to have more opps for students who don't go to college, can go directly to WF. Ppl can envision these jobs.

** Gather a list of resources and put it on OSSE web page, so ppl get to know them – to do item for Candace

Bring in ppl to help guide messaging to advertise programs, and sim.

They talk about atrocities – Flint, MI, for example – connect it to doing things to improve water Q, for example – bring ppl in to teach about it.

Some atrocities happen when our infrastructure fails.

Flooding in DC – envi'l resilience issues – solar projects, etc. should be considered in careers that are in high demand (envi'l opps should be presented along with other opps)

Health science progr- opp to connect to envi – conversations aren't happening, need to figure out who should be part of them.

- ** Have a Sustainability Plan but it's not reflected in these other things.
- ** Biggest CTE thing how can we add components into existing programs to add lens of E-Lit building is a huge way we can make an impact on what happens.

Those who can inform the convo don't get invited.

Accountability			
Programs can benefit from having core competencies.			
High Impact Actions for Sustainable Schools			
DC Breakout – NOTES			
Looked at the diagram of decision-makers – drew on it			
Instructional sups for DCPS – one chancellor, then heads of schools, CEOs for charter districts			
Who is accountable to whom is very confusing			
DGS doesn't work in charter districts			
A lot of legislation that covers green infrastructure in schools, but doesn't apply to charters so don't know what they're doing.			

Being a voice

Where are the opportunities within this system map to advance high impact action?

- o UDC is the state univ, connects to LEAs, quasi-independent, connct also to USDA and Exec Ofc of the Mayor UDC is like an octopus
- o Greenhouses, hydroponics, etc. at various schools connection w/ USDA
- o How define sustainable actions at schools? Energy or waste reduction and sim? Yes (actions that can realize big impacts of savings across the district among its facilities). They do also have Ag programs that lead to sustainability that don't necessarily impact the facility operations.
- o Master facilities plan Deputy Mayor for Education DME ed specs describe physical conditions currently, future... and make recs to address needs. Efficiently utilized, every student enrolled in modern state of the art and well maintained facility. Those aren't necessarily defined. Who sets those and who amongst those ppl are considering sustainability? **DGS has been part of the conversation but they only oversee public schools not the charters**.
- o High impact actions where are the policies that raise the water for all boats?

- o DGS modernization projects include solar, net zero but there's no oversight for the charter schools, and some have multiple campuses, don't know if they have guiding principles for sustainability. Charter schools have a board could you go to their board mtgs? Go wherever they may already be gathering/ interacting? they approve a charter to function but they don't have a role in the facilities, but they could. Head of School is the decision maker at the school charter districts' CEO has more power than the Sup of DCPS. They operate as independent for-profits or non-profits.
- Vast majority of work orders from DCPS to DGS that take a long time are in HVAC potential solutions around contracting mechanisms, standards for the systems, etc. = potential high impact action, supporting DGS
- Jenn Comey in Deputy Mayor for Education office (DME) is a good person to engage
- o Template for local wellness policy has an envi'l sustainability section
- o Next 30 days, could get language around the ELit plan to put into the Nat Arb's teacher newsletter to help them know how to incorporate into their teaching communication important (overcommunication is needed)
- o Who are the transformational leaders? Challenge of the diffuse charter situation in DC.
- o Character districts have their own kickoff things there are 67 of them, and some of them have 10 campuses and some have one.
- o What have you done at your schools, what has been successful and beneficial to you in working with EE providers or other partners. Need an MOA...
- o Charter schools are aoubt half 125 DC public school campuses; ~111 charter schools in 67 districts
- o What will they respond to? \$ savings? Health? Can that be communicated to them? it's different in every district. Split betw being national & regional. Some centralize operations, some don't. Diff incentives what's their bottom line?
- o Is there opp for grant \$ to pay a contractor to work w/ all of the charter schools to find out what's happening, where are there opps, what are the needs and priorities? could explore if there is a resource
- o Next farm to school grant prob due in next 30+ days is there something in there?
- o Title IV \$ for EE is available thru ESSA have to figure out who can spend it. For out of school time, EE is named in the title. 1^{st} C school grants get paid our of Title IV. Someone in OSSE decides that. There's a state plan that describes how that \$ gets spent. Couple positions in the DME office that handle that.
- o K-12 supports office?

Who needs to be involve	ed or is best situate	ed to lead/engage,	/influence?
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- 0 ...
- 0 ...

What could we do within the state to strengthen support for high impact actions for sustainable schools in the next year?

- 0 ...
- 0 ...

AFTERNOON BREAKOUT - DC

Reflecting on what you heard today about high impact actions for sustainable schools & workforce,

How should all of that inform the direction of ELIt at CBP going forward? What would you like to see in the (E-Lit) Outcomes?

Current Outcomes – tho don't have to be constrained by these, can suggest changing --

- · MWEE at every grade band for all students
- · Sust practices integrated into bldgs and grounds
- Planning coordination w/in districts

DC ELIT #s look good bec only the public school district reports.

Energy & climate – particularly at ms and hs how much meaningful watershed educ actually applies? Can that shift to be more around sustainability?

Watershed word in MWEE is almost limiting – a lot of work being done that is a MWEE doesn't seem like it's a MWEE bec it's not around water – does EE necessarily have to be green, water conservation type work, or can it be energy, solar, etc – yes, think it can be.

Shift emphasis to better fit climate and sustainability into it across the board (not limited to "watershed").

MWEEs as a tool for educators – great way to deliver the content

Every school in DC fills out school health profile. ELIT is a tool used across the jurisdictions, and other states don't treat charter schools the same way.

Only DCPS is counted in the national school education progress (??)

Budget caps barrier this year and next year – impacts growing MWEEs – need support from other agencies working w/ DCPS, sim to how PGCPS has support from Schmidt. DC needs more \$\$. – Prioritize as a district funding sources to implement CBP Outcomes MWEEs in each grade band.

Allocate funding in District to implement programming specific to the ELit goal/ outcomes specifically, but also might need funding for all of the CBP Outcomes.

Something focused on CTE / Workforce -

Something transformative – incorporate it as a component across all content areas – NAF academies have requirements (reach out to the national offices who accredit the programs, that would apply to the whole watershed) – add something along lines of MWEE and incorporating sustainability into all the career programs (hospitality – don't wash the towels every day, food service things).

MD Family and Consumer Science Day – focus on family & communication – do something similar that focuses on sustainability, or make it part of CTE month

Something to do in a big way across the watershed?

- · Student experiences
 - o MD has an overnight experience at 5th or 6th grade
 - o Something required across the watershed -
 - § Outdoor School for All follow the model of states like OR, WA, NM... w/ statewide funding and infrastructure to support and teachers to have the tools
 - § Sim to Every Kid in Parks concept
 - § Maybe combine these 2 ideas into a more comprehensive program?
- Mandate EE teacher preparation? for EE part of requirements -- Teachers are interested but uncomfortable teaching about the envi't
- Teachers as leaders build cohort or program w/ teachers as leads
- Most schools in district have community service requirement to graduate designate a certain # of hours
- CTE orgs play a part in E-Lit designated audience make students in orgs a champion for something environmental student competition? Entrepreneurs
- When schools have money available, they put it into math some way to put it into EE
- · Training for principals, admin leadership, school system decision-makers