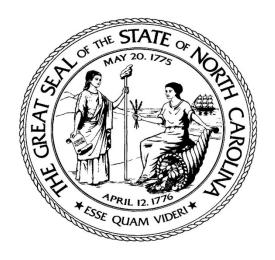# NORTH CAROLINA GENERAL ASSEMBLY

HOUSE SELECT COMMITTEE ON ADVANCING WOMEN IN STEM

REPORT TO THE
2023 HOUSE OF REPRESENTATIVES

DECEMBER 6, 2022

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TRANSMITTAL LETTER

December 6, 2022

TO THE MEMBERS OF THE 2023 House of Representatives

The HOUSE SELECT COMMITTEE ON ADVANCING WOMEN IN STEM respectfully submits the following report to the 2023 House of Representatives.

_____
Rep. Erin Paré (Chair)

_____
Rep. Donna White (Vice-Chair)

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COMMITTEE PROCEEDINGS

The House Select Committee on Advancing Women in STEM met four times after the 2021 Regular Session. The following is a brief summary of the Committee's proceedings. Detailed minutes and information from each Committee meeting are available in the Legislative Library.

August 24, 2022

Committee Charge
Drupti Chauhan, Legislative Analysis Division

SAS Institute
Danielle Pavliv, Chief Diversity Officer
Jennifer Sabourin, Senior Software Developer, Corporate Social Innovation
Erica Prentice, K-12 Education Specialist
Michelle Proctor, Chief of Staff, Risk Research and Quantitative Solutions

Accelerate Success
Terri Mitchell, Founder and CEO of Accelerate Success and member of Triangle Women in STEM

Amgen Foundation
Ashely Young, Corporate Affairs Manager, Science Education Program Manager, Amgen Foundation

NCBIO (NC Bioscience Organization)/AskBIO/Women in BIO
Laura Gunter, President, NCBIO
Ann Vogel, Senior Vice President, Charitable Programs, iBIO (Illinois BIO)
Sheila Mikhail, CEO, Co-Founder and Board Director, AskBIO
Shirley Paddock, Women in BIO – RTP Chapter, and Senior Vice President of Clinical Development, Syneos Health

The House Select Committee on Advancing Women in STEM held its first meeting on August 24, 2022, at SAS Institute, 820 SAS Campus Dr. Cary, North Carolina. Representative Paré presided as Chair of the meeting.

Drupti Chauhan, Committee Counsel, provided the Committee with an overview of the Committee's charge.

The Committee first heard from Danielle Pavliv, Chief Diversity Officer; Jennifer Sabourin, Senior Software Developer, Corporate Social Innovation; Erica Prentice, K-12 Education Specialist; and Michelle Proctor, Chief of Staff, Risk Research and Quantitative Solutions, who held a panel discussion on their experience as women in the STEM field,

challenges and successes they have faced throughout their career, the steps SAS is taking to help attract and retain women in the field, and made some suggestions on how to attract more girls and women to the STEM field for the Committee's consideration. After the panel discussion they answered questions from the Committee.

The Committee then heard from Terri Mitchell, Founder and CEO of Accelerate Success (Program). Ms. Mitchell talked to the Committee about women representation in the different fields and academia and highlighted the difference in pay between women and men who are in the same field. She gave data on women's STEM Degree participation rates in the United States compared to those in India, Canada, Mexico, Germany, and China. The focus of Ms. Mitchell's Program is specifically on college women and aims to support and encourage undergraduate women in STEM to retain them in their majors. The Program is a four-year undergraduate program where women meet monthly for discussion sessions around the field, provides role models and career ideas, and provides mentoring for the entire undergraduate experience. Ms. Mitchell then talked about the Triangle Women in STEM initiative which aims to build a diverse community of women in STEM in the Triangle through partnerships with the local industry, universities, nonprofits, and local government. Ms. Mitchell highlighted the challenges to expand the Program to additional universities and gave some recommendations for the Committee's consideration. Ms. Mitchell then answered questions from the Committee.

The Committee then heard from Ashley Young, Corporate Affairs Manager, Program Manager Science Education for Amgen Foundation. The Amgen Foundation's mission is to advance science education by funding evidence-based science educational programs for students and teachers around the world and strengthen communities. Their priorities are focused on reaching underserved students and teachers, giving students real-world lab experiences and access to high-quality educational content, and providing science teachers with professional development opportunities and training through the Amgen Biotech Experience. The Amgen Scholars Program is a summer research program for students who are interested in STEM, but who attend schools that may not have sufficient funding or capability to offer a science-based undergraduate research program. The program is partnered with 24 institutions of higher education, with 13 of them in the United States. Ms. Young talked briefly about other programs they have such as LabXchange and encouraged members to read about their Amgen Scholars program and Khan Academy. Ms. Young then answered questions from the Committee.

The Committee then heard from Laura Gunter, President of NCBIO; Sheila Mikhail, CEO, Co-Founder and Board Director of AskBio; Shirley Paddock, Women in BIO (WIB), Senior Vice-President of Clinical Development for Syneos Health; and Ann Vogel, Senior Vice-President of Charitable Programs, iBIO. Ms. Gunter talked to the Committee about the STEMgirls RISeUP program which seeks to increase the number of historically underrepresented girls choosing careers in STEM fields and gave an overview of their 5-day STEMgirls summer camp. The Committee then heard from Ms. Paddock who talked to the Committee about WIB, a national nonprofit organization of professionals committed to promoting career, leadership, and entrepreneurship for all women in life sciences. Young Women in Bio is WIB's program targeted to expose girls to careers in STEM from their

early school grades. The Committee then heard from Ms. Mikhail who talked about AskBio's approach to attracting and retaining women in STEM through strengthening partnerships with academia and providing internship opportunities for college students, enhancing career development and addressing issues unique to women. The presenters then answered questions from the Committee.

September 7, 2022

Igniting the Tech Workforce Pipeline, Diversity & Student Success
Jamey Falkenbury, Director of Government Affairs, Department of Public Instruction

NCCCS & Women in STEM
Dr. Lisa Eads, Associate Vice President of Programs, NC Community College System

The University of North Carolina System - Women in STEM
Dr. David English, Acting Senior Vice President of Academic Affairs for the System Office
Dr. Laura Bottomley, NCSU Professor of Electrical Engineering and Elementary Education and Director of WISE (Women in Science and Engineering)
Dr. Stephanie Luster-Teasley, Dean of College of Engineering, NC A&T

North Carolina Independent Colleges and Universities – Women in STEM
Dr. A. Hope Williams, President, NC Independent Colleges and Universities

The House Select Committee on Advancing Women in STEM held its second meeting on September 7, 2022, at the Legislative Office Building in Raleigh, North Carolina. Representative Paré presided as Chair of the meeting.

Jamey Falkenbury, Director of Government Affairs with the Department of Public Instruction (DPI), talked to the Committee about DPI's efforts to keep North Carolina as a leader in technology education. Data shows that North Carolina has close to 30,000 unfilled jobs that require some type of computer science and, by 2040, more than 70% of all jobs will require a background in computer science. Mr. Falkenbury informed the Committee that in 2016 about 25 teachers in North Carolina were qualified to teach computer science, by 2019-2020 there were 425 trained teachers, and, by the end of the 2022 summer session, more than 800 teachers had been trained. Mr. Falkenbury informed the Committee that 67% of all new jobs in STEM are in computing, but only 11% of STEM bachelor's degrees are in computer science, emphasizing the need to increase computer science courses at all educational levels, as well as training and professional development for teachers. Mr. Falkenbury then talked about DPI's efforts to bring more focus to computer science, including a Computer Science Ed Week scheduled for December; the #IAMCS campaign to highlight computer science opportunities in North Carolina; and the Coding in Minecraft Grant, a partnership between DPI, Microsoft, and Prodigy Learning, a multiyear project to bring the 'Coding in Minecraft' credential program to all middle school students across the state. Mr. Falkenbury then gave some recommendations for the Committee's consideration and answered questions from the Committee.

The Committee then heard from Dr. Lisa Eads, Associate Vice President of Programs for North Carolina Community Colleges. Dr. Eads informed the Committee that the North Carolina Community College System (NCCCS) has been a leader in STEM programs for women for many years and provided an overview of women in STEM enrollment trends. She talked about systemwide STEM initiatives such as BioNetwork, which provides high-quality economic and workforce development for biotechnology and life science industries across North Carolina through education, training, and laboratory resources, and the NC BioBetter Project, which provides funding aimed to strengthen North Carolina's life sciences manufacturing clusters by expanding and promoting training and career opportunities to underserved and rural communities. She then highlighted individual colleges that are working towards expanding the STEM workforce through programs such as Wake Technical Community College's (WTCC) START Internship Program, Wilkes Community College's High Tech Girls Day and Women in Cyber Security virtual meet and greet, and Vance-Granville Community College's Women in STEM Virtual Summit. Dr. Eads then answered questions from the Committee.

The Committee then heard from Dr. David English, Acting Senior Vice President for Academic Affairs for The University of North Carolina System Office (UNC System). Dr. English informed the Committee that increasing STEM degree production has been a top strategic plan objective for the UNC System since 2017. He talked about enrollment growth and informed the Committee that degrees in STEM have grown consistently over the past 15 years and informed the Committee that female STEM degrees produced as a percentage of all STEM degrees is higher in the UNC System than national data at the bachelor's, master's, and doctoral level.

Dr. Louis Martin-Vega, Dean of Engineering at NC State University, addressed the Committee to talk about his efforts to diversify enrollment in the College of Engineering and introduced Dr. Laura Bottomley, NC State University Professor of Electrical Engineering and Elementary Education and Director of Women in Science and Engineering, who gave an engineering perspective on advancing women in STEM. Dr. Bottomley gave a summary of NC State's percentage of female enrollment in STEM programs and informed the Committee that NC State is a leader in awarding engineering bachelor's degrees to women. She then talked about the Women in Science and Engineering (WISE) Living and Learning Community that was started in 2002 as a collaboration between NC State's five STEM Colleges to change the climate of the Colleges to better reflect NC State's diverse student population and recruit and retain women leaders in the field. Dr. Bottomley then talked about NC State's efforts to begin exposing students to engineering ways of thinking as early as possible, through engineering summer camps, family STEM nights, and Bits and Bytes Days, which are STEM curriculum enrichment experiences for elementary students. She talked about NC State's educational partnerships, future goals, and challenges and barriers. Dr. Bottomley answered questions from the Committee.

The Committee then heard from Dr. Stephanie Luster-Teasley, Dean of the College of Engineering at NC A&T, who talked to the Committee about NC A&T's ADVANCE-IT

Project which aims to increase recruitment and retention of women in STEM at NC A&T by building a pipeline for academia and professional success and create a whole campus culture of excellence in STEM research and scholarship. She shared outcomes and successes of ADVANCE-IT in retention and advancement of women faculty, leadership roles, policy development, and recruitment. Dr. Luster-Teasley then gave some recommendations for the Committee's consideration and answered questions from the Committee.

The Committee then heard from Dr. A. Hope Williams, President of North Carolina Independent Colleges and Universities (NCICU). Dr. Williams talked about some of the barriers female and minority students entering STEM careers face and talked about NCICU's pilot program to improve retention and graduation rates among first generation college students, women, and students of color in STEM majors. She talked about the scholarships and mentoring opportunities that NCICU students have access to, such as the NC GlaxoSmithKline Foundation Women in Science Scholars, National Science Foundation Scholarships and Grants, and KERN Family Research for All (R4A), an engineering student research grant at Campbell University. Dr. Williams informed the Committee that much of the growth NCICU has seen in STEM has been in health sciences, however, they are starting to see growth in engineering programs and listed several internship opportunities accessible to students. She then talked about NCICU's efforts to engage students early on through mentoring networks on different campuses and student professional organizations. Dr. Williams gave some recommendations for the Committee's consideration and answered questions from the Committee.

October 12, 2022

Approval of Committee Minutes
August 24, 2022
September 7, 2022

Department of Commerce – NC Women in STEM
Emily Roach, Director of Policy & Planning, Department of Commerce
Dr. Jenni Harris, Executive Director of Business Services, Division of Workforce Solutions
Jeffrey DeBellis, Director of Economic & Policy Analysis, Labor & Economic Analysis Division

Betabox Learning – Betabox NC Pilot Overview
Sean Maroni, CEO, Betabox Learning
Rafi Vaca-Tricerri, Lead Educator, Betabox Learning
Greg Pealman, Chief Success Officer, Betabox Learning

Future City Competition
Pamela Townsend, PE, Senior Vice President, WSP
Phyllis King, CTE NBCT, Lumberton Jr. High School
Dr. Leah Townsend, President, Pulvinar Neuro; Chief Science Officer, EPI

North Carolina Association of CPAs – Accounting as STEM
Dr. Courtney Knoll, CPA, UNC Kenan-Flagler Business School, Clinical Professor of Accounting, Associate Dean of the Master of Accounting Program, Executive Director of the UNC Tax Center
Kelli Knoble, CPA, Grant Thornton LLP, Partner – National Tax Business Line Leader
Scott Showalter, CPA, NCSU Poole College of Management, Professor of Practice and Director of the Master of Accounting Program

The House Select Committee on Advancing Women in STEM held its third meeting on October 12, 2022, at the Legislative Office Building in Raleigh, North Carolina. Representative Paré presided as Chair of the meeting.

The Committee approved Committee Minutes for meetings on August 24, 2022, and September 7, 2022.

The Committee then heard from Jeffrey DeBellis, Director of Economic & Policy Analysis for the Labor & Economic Analysis Division with the Department of Commerce (Department), who gave the Committee a brief explanation of what the Department does and the type of research and analyses they perform. Mr. DeBellis informed the Committee that for the presentation's purposes, when he talks about STEM Occupations, the focus is on the workers and when he talks about STEM Industry, the focus is on the employers and work production. He indicated that 82% of STEM jobs require at least a bachelor's degree and employers report having too few applicants and lack of employability skills as the top reasons for having difficulties hiring for entry-level positions. Mr. DeBellis then reviewed the fastest growing STEM occupations in North Carolina, gave data on women's employment and earnings in STEM industries and non-STEM industries from 2011 to 2021, and talked to the Committee about what the Department is doing to provide unbiased occupational, educational, and credential information to North Carolinians to help bring more awareness of STEM opportunities. The Committee then heard from Dr. Jenni Harris, Executive Director of Business Services with the Division of Workforce Solutions, who talked to the Committee about the NCWorks Commission's mission to ensure that North Carolina has an innovative, relevant, and efficient workforce development system that meets current and future workforce needs, and recruitment and talent acquisition strategies being developed. The Committee then heard from Emily Roach, Director of Policy & Planning with the Department, who talked about Secretary Sanders' initiatives to support women in STEM industries. The First in Talent plan includes strategies to enable more women to enter the workforce by increasing access to childcare, education, training, and family-friendly work environments. She informed the Committee that the Department was the first State agency to participate in Wake Technical Community College's Wake Invests in Women Challenge, a workforce development initiative aimed at closing gender wage and representation gaps in STEM occupations in Wake County and the Research Triangle region. Ms. Roach then highlighted other initiatives by Secretary Sanders to support women in STEM industries. The presenters then answered questions from the Committee.

The Committee next heard from Sean Maroni, CEO of Betabox Learning, who gave an overview of the Betabox NC Pilot. The Betabox NC Pilot is designed to increase hands-on technology instruction in 100 rural and low-income schools in 30 districts in North Carolina. Their mobile units are learning labs that come to the school, are equipped with Wi-Fi, and allow students to experience STEM. Mr. Maroni reviewed the steps schools must complete to schedule an onsite field trip with Betabox, the experiences students and teachers can expect to have, and gave a summary of data reported on student and teacher impact after their Betabox experience. The Committee then heard from Rafi Vaca-Tricerri, Lead STEM Instructor, who talked to the Committee about guiding young women into STEM. She talked about her experience running the learning labs and how students react and interact during the experience. The presenters answered questions from the Committee.

The Committee then heard from Pamela Townsend, PE, Senior Vice President, WSP, about the Future City Competition, which is part of a national STEM program for middle school students where they work in teams with a volunteer industry mentor and educator to imagine, design, and build cities of the future. The teams must complete the following four deliverables: 1,500-word essay based on a yearly theme, project plan, scale model of the city built from recycled materials, and have a presentation and Q&A from STEM industry judges. Ms. Townsend reviewed previous essay themes, the history of the Future City Competition nationally and in North Carolina, and explained to the Committee what students can expect on competition day. The competition introduces students to the engineering design process and teaches them objective problem solving skills that can be applied to all kinds of challenges and other school assignments. The Committee then heard from Phyllis King, CTE instructor at Lumberton Jr. High School. Ms. King informed the Committee that she has participated in the Future City competition for her entire career as an educator because she sees that it engages students in a way that attracts them to consider STEM careers. She said she sees students gain confidence in themselves, experience high-quality project-based learning, and their math and science skills are strengthened. Ms. King made some recommendations for the Committee's consideration. The Committee then heard from Dr. Leah Townsend, President of Pulvinar Neuro and Chief Science Officer at EPI, who talked to the Committee about her experience as a former participant and team mentor of Future City and its efforts to attract students into STEM fields. Dr. Townsend informed the Committee that Future City provides critical enrichment opportunities, including developing and strengthening critical thinking skills, supporting student-led project management, and fostering intellectual curiosity, and emphasized that these skills and experiences are essential for inspiring and preparing North Carolina's future STEM workforce. The Committee then heard from Pamela Townsend again, who provided an update on the number of schools that are registered for the competition for the 2022-2023 school year and the competition's short-term and long-term goals and gave recommendations for the Committee's consideration on what the General Assembly can do to help sustain and grow the competition in North Carolina. The presenters answered questions from the Committee.

Robert Broome, Director of Advocacy for North Carolina Association of CPAs, spoke briefly about the accounting profession and introduced the presenters for the Association. Dr. Courtney Knoll, CPA, and UNC Kenan-Flagler Business School Clinical Professor of

Accounting and Associate Dean of the Master of Accounting Program, spoke to the Committee about the importance of accounting and CPAs and how both are needed for running any type of business. Dr. Knoll informed the Committee that the accounting profession is evolving through technology and highlighted some of the technological tools that are necessary in the accounting profession today, such as IT auditing, data visualization, data analytics, and cybersecurity among others. She informed the Committee that the accounting profession is facing concerns about the student pipeline and diversity, with a decline in undergraduate enrollment and graduation rates nationwide, and women and minorities continue to be underrepresented amount accounting students and graduates. The Committee then heard from Scott Showalter, CPA, and NCSU Poole College of Management Professor of Practice and Director of the Master of Accounting Program, who talked to the Committee about when and how we can attract more students to the accounting profession. The Committee then heard from Kelli Knoble, CPA, and Partner at Grant Thornton, LLP, who talked about efforts being made at the Federal and State level to designate accounting as a STEM field and the different organizations that support the designation. The presenters then answered questions from the Committee.

December 6, 2022

Approval of Committee Minutes
October 12, 2022

Approval of Committee's Report to the 2023 House of Representatives

The House Select Committee on Advancing Women in STEM held its fourth meeting on December 6, 2022, at the Legislative Office Building in Raleigh, North Carolina. Representative Paré presided as Chair of the meeting.

The Committee approved Committee Minutes for the meeting on October 12, 2022.

Drupti Chauhan, Committee Counsel, provided an overview of the Committee's findings and recommendations and Cory Holliday and Matt Pagett, Staff Attorneys for the Bill Drafting Division, explained the proposed legislation accompanying the report. The Committee then adopted this final report.

FINDINGS AND RECOMMENDATIONS

Based on information presented to the House Select Committee on Advancing Women in STEM (Committee) during its scheduled meetings, the Committee makes the following findings and recommendations to the 2023 House of Representatives:

Increasing Women's Participation in Science, Technology, Engineering, and Math (STEM) Professions

The Committee finds that the economic future of the State will be very dependent on having qualified workers in STEM professions and that encouraging girls, women, and underrepresented minority communities to pursue these fields will help maintain a strong economic workforce in the State. A strong STEM workforce requires an early focus on the subjects beginning in elementary and middle school and continuing with more exposure and support in high school and at post-secondary educational institutions. Providing students with real-world STEM experiences in school and high-quality science and math teachers will facilitate stronger interests in the STEM fields and increase STEM literacy for future workers. The Committee strongly encourages public school units, North Carolina community colleges, and the constituent institutions of The University of North Carolina to emphasize STEM education and engage with companies and organizations to provide mentoring and STEM enrichment opportunities and activities for their students and STEM educators. Therefore, the Committee recommends that the General Assembly facilitate more STEM awareness in public education by establishing the Increasing Engagement in STEM Program and appropriating one million dollars for the Program.

See Attached Legislative Proposal 2023-NGza-6

Furthermore, the Committee finds that the General Assembly should reinforce success by investing in the expansion of STEM initiatives that are producing positive outcomes in the State. The Committee finds that by increasing opportunities for STEM enrichment for all students, the participation of women and girls and underrepresented minority community members will increase. As a result, the Committee strongly encourages the General Assembly to invest an additional five million dollars in targeted grants to programs, including and in addition to those identified by this Committee, that have a proven track record of providing the skills, experiences, and critical enrichment opportunities necessary to build a strong, qualified STEM workforce pipeline in the State. The Committee encourages the General Assembly to target grants based on areas of workforce priority needs in State, including and in addition to those identified through the work of this Committee.

Computer Science Education in the North Carolina Public Schools

The Committee finds that the State has been a leader in technology and education and the General Assembly has committed to advancing STEM education and specifically computer science education in the public schools. The Department of Public Instruction has adopted computer science standards for the North Carolina Standard Course of Study along with a Division of Computer Science dedicated to advancing computer science in the public schools. The Committee further finds that over 800 public school teachers have been trained to teach computer science and over 91% of public school units offer a computer science course to their students, with 63% of the student population having access to a course. However, only 47% of individual schools offer a computer science class so there are still access limitations for students. As a result, the Committee strongly encourages the General Assembly to direct public school units to make computer science education a priority through more course offerings. In addition, the Committee encourages the General Assembly to consider the following: (i) State-level stipends for educators who participate in professional development for computer science and (ii) increasing salaries for educators who teach STEM courses.

STEM Initiatives at NC Institutions of Higher Education

North Carolina Community Colleges
The Committee finds that North Carolina community colleges have provided a firm foundation for individuals pursuing STEM careers with women taking particular advantage of the various STEM programs. Women account for 65% of enrollment in biological and chemical technology programs, 88% of the health science programs, and 73% of the accounting and finance programs. In addition, the Community College System has established STEM transfer degree programs and articulation agreements to facilitate more students being able to obtain both associates degrees in STEM fields along with transferring STEM course credits to four-year higher education institutions. The Community College System also focuses on responding to the workforce needs of the private sector with initiatives such as the NCCCS BioNetwork to provide training and education in life sciences and biotechnology. Emphasis is also being placed on increasing the success and retention of students pursuing STEM degrees with local community colleges establishing programs to provide additional supports and apprentice-style experiences.

The University of North Carolina
The Committee finds that the UNC System has made concerted efforts to increase the number of STEM degrees across the various UNC constituent institutions and female STEM degrees produced as a percentage of all STEM degrees is higher in the UNC System than national data at the bachelor's, master's, and doctoral levels. Furthermore, increasing STEM degree production has been a top tier strategic plan objective for the UNC System since 2017.

Campus-led initiatives are now focusing on graduating students and not just enrolling them. For example, at North Carolina State University, the Women in Science and Engineering Living and Learning Community was started to provide additional supports to female students and now collaborates with industry partners such as John Deere, Eastman, Microsoft, and Caterpillar. NC State has also focused on outreach to expose students to

engineering in PreK to grade 12 through programs such as summer camps and collaborations with public schools. NC A&T University has focused on increasing representation and career advancement of women in STEM at the university as well as increasing opportunities for sustained achievement of all faculty through a whole campus culture of excellence in STEM research and scholarship through its ADVANCE IT project.

The Committee strongly encourages the UNC System and its constituent institutions to continue to emphasize STEM degrees and excellence in STEM research activities and establish more partnerships with the private sector to meet changing workforce needs. Furthermore, the Committee recommends that the Board of Governors of The University of North Carolina study and report to the General Assembly on whether to incorporate computer science as a minimum course requirement for admission as an undergraduate student at a constituent institution of The University of North Carolina.

See Attached Legislative Proposal 2023-MTz-8

North Carolina Independent Colleges and Universities

The Committee finds that the North Carolina Independent Colleges and Universities (NCICU) provide great educational value to the State by awarding significant numbers of STEM degrees. NCICU campuses continuously seek out partnerships with foundations and companies that can provide grants, internship opportunities, and mentoring networks for students pursuing STEM degrees. The Committee encourages the General Assembly to consider increasing funding for the Forgivable Education Loan Program for STEM degrees as well as providing financial aid for summer classes for STEM courses.

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COMMITTEE MEMBERSHIP

2022

Speaker of the House of Representatives Appointments:

Rep. Erin Paré (Chair)
Rep. Donna McDowell White (Vice-Chair)
Rep. Dean Arp
Rep. Kristin Baker, M.D.
Rep. Hugh Blackwell
Rep. John R. Bradford, III
Rep. Allison A. Dahle
Rep. Jon Hardister
Rep. Amos L. Quick, III
Rep. Diane Wheatley
Rep. Shelly Willingham
Rep. Matthew Winslow

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COMMITTEE CHARGE/STATUTORY AUTHORITY

Office of the Speaker
North Carolina House of Representatives

TIM MOORE
SPEAKER OF THE HOUSE

HOUSE SELECT COMMITTEE ON
ADVANCING WOMEN IN STEM TO THE HONORABLE MEMBERS OF THE
NORTH CAROLINA HOUSE OF REPRESENTATIVES

Section 1. The House Select Committee on Advancing Women in STEM (hereinafter "Committee") is established by the Speaker of the House of Representatives pursuant to G.S. 120-19.6(a1) and to Rule 26(a) in Section 1 of the Rules of the House of Representatives of the 2021 General Assembly.

Section 2. The Committee consists of twelve members appointed by the Speaker of the House of Representatives. The membership of the Committee shall include legislators as specified below. Members serve at the pleasure of the Speaker of the House of Representatives. The Speaker of the House of Representatives may dissolve the Committee at any time. Vacancies are filled by the Speaker of the House of Representatives. A Chair, Vice-Chair, or other member of the Committee continues to serve until a successor is appointed. The Committee shall meet upon the call of its Senior Chair.

Representative Erin Pare, Chair	Representative Alison Dahle
Representative Donna White, Vice Chair	Representative Jon Hardister
Representative Dean Arp	Representative Amos Quick
Representative Kristin Baker	Representative Diane Wheatley
Representative Hugh Blackwell	Representative Matthew Winslow
Representative John Bradford	Representative Shelly Willingham

Section 3. The Committee, while in the discharge of its official duties, may exercise all powers provided for under G.S. 120-19 and Article 5A of Chapter 120 of the General Statutes. The Committee may contract for professional, clerical, or consultant services, as provided by G.S. 120-32.02.

Section 4. The Committee shall study issues related to developing future generations of women leaders in Science, Technology, Engineering, and Mathematics (STEM), including but not limited to the following:

    a. Policies, programs, and initiatives that advance the growth and development of women in STEM fields.

    b. Existing barriers to entry in STEM career fields for women and other underrepresented minorities.

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c. The important role women play in economic growth, groundbreaking research, and life-changing innovation.

d. Benefit of early exposure to future career opportunities in STEM fields

e. The advancement of future female leaders in STEM fields through partnerships with North Carolina Universities, North Carolina community colleges, the nonprofit and private sectors.

f. Any other issue deemed relevant by the Chair to the charge of the Committee.

The Committee may seek information from experts in STEM fields and STEM education, or as deemed appropriate by the Chair.

Section 5. The Committee shall meet at the call of the Chair and may meet during the session of the General Assembly, the interim period between sessions, or during recesses of the General Assembly.

Section 6. Members of the Committee shall receive per diem, subsistence, and travel allowance as provided in G.S. 120-3.1.

Section 7. The expenses of the Committee including per diem, subsistence, travel allowances for Committee and working group members, and contracts for professional or consultant services shall be paid upon the written approval of the Speaker of the House of Representatives pursuant to G.S. 120-32.02(c) and G.S. 120-35 from funds available to the House of Representatives for its operations. Individual expenses of $5,000 or less, including per diem, travel, and subsistence expenses of members of the Committee and working groups, and clerical expenses shall be paid upon the authorization of any Chair of the Committee. Individual expenses in excess of $5,000 shall be paid upon the written approval of the Speaker of the House of Representatives.

Section 8. The Legislative Services Officer shall assign professional and clerical staff to assist the Committee in its work. The Director of Legislative Assistants of the House of Representatives shall assign clerical support staff to the Committee.

Section 9. The Committee may meet at various locations around the State in order to gather testimony and to promote greater public participation in its deliberations.

Section 10. The Committee shall submit a report on the results of its study, including any proposed legislation, by December 31, 2022, to the members of the House of Representatives by filing a copy of the report with the Office of the Speaker of the House of Representatives and the Legislative Library. The Committee shall terminate on December 31, 2022, or upon the filing of its report, whichever occurs first.

Effective this 7th day of June, 2022.

_____

Tim Moore, Speaker

LEGISLATIVE PROPOSALS

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H   D

BILL DRAFT 2023-NGza-6 [v.19]

(THIS IS A DRAFT AND IS NOT READY FOR INTRODUCTION)
10/26/2022 01:34:24 PM

Short Title:	Increasing Engagement in STEM Grant Program.	(Public)
Sponsors:		
Referred to:		

A BILL TO BE ENTITLED
AN ACT TO ESTABLISH THE INCREASING ENGAGEMENT IN STEM PROGRAM,
AS RECOMMENDED BY THE HOUSE SELECT COMMITTEE ON ADVANCING
WOMEN IN STEM.
The General Assembly of North Carolina enacts:

SECTION 1.(a) Program; Purpose. – The Superintendent of Public Instruction shall establish the Increasing Engagement in STEM Program (Program) for the 2023-2025 fiscal biennium. The purpose of the Program is to provide grant funds to public school units to engage in experiential science, technology, engineering, and math (STEM) education programs.

SECTION 1.(b) Grant Application Timeline. – The Superintendent shall develop and publish an application for the Program on or before October 15, 2023. Public school units may submit applications for this grant until March 15, 2024. The Superintendent shall select recipients of the grants by April 15, 2024.

SECTION 1.(c) Grant Applications. – The application created by the Superintendent shall require a plan of how the public school unit would use grant funds to increase STEM engagement of sixth, seventh, and eighth grade students. Applicant plans shall include the following:

(1)   Evidence that the plan uses high-quality instruction methods and includes research-based best practices in the area of STEM education to further the purpose of the Program.

(2)   How grant funds will be used to further the purpose of the Program. Allowable uses of funds include, but are not limited to, the following:
   a.   Stipends for teachers who participate with the Program.
   b.   Partnering with third-party vendors to provide services or host competitions that further the purpose of Program.

(3)   How the public school unit would sustain their plan beyond the end of the grant period.

(4)   Any other factors or criteria the Superintendent deems appropriate to advance the purpose of the Program.

SECTION 1.(d) Grant Recipients. – After reviewing the submitted applications, the Superintendent shall select applicants to receive grants for the Program. The Superintendent shall determine the size of grants awarded to each public school unit while ensuring a distribution of grant funds to each of the various sizes of public school units referenced in subdivision (3) of this subsection. When selecting applicants to receive grants, the Superintendent shall adhere to the following criteria:

       (1)   The total number of recipients shall not exceed 20 public school units.

       (2)   Recipients shall reflect the geographic diversity of the State.

       (3)   Recipients shall reflect the population diversity of public school units in the State by selecting recipients from the following:

           a.   Up to five public school units consisting of no more than one school.

           b.   Up to five units with an average daily membership from the previous school year of 4,000 students or fewer.

           c.   Up to five units with an average daily membership from the previous school year of between 4,001 and 20,000 students.

           d.   Up to five units with an average daily membership from the previous school year of 20,001 students or greater.

If there are fewer than five applicants in any of the categories listed in subdivision (3) of this subsection, the Superintendent may, in the Superintendent's discretion, award additional grants to applicants from other categories.

SECTION 1.(e) Initial Report. – The Superintendent of Public Instruction shall submit an initial report on the application process for the Program to the Joint Legislative Education Oversight Committee by May 15, 2024. The initial report shall include the following:

       (1)   A list of public school units that applied for grants.

       (2)   A list of public school units that received grants.

       (3)   A summary of how the grant funds will be spent on Program activities according to the plans submitted by grant recipients.

       (4)   Any other information the Superintendent deems relevant.

SECTION 1.(f) Final Report. – At the conclusion of the 2024-2025 school year, public school units that received grants shall report to the Superintendent any information required by the Superintendent on the outcomes of their plans. The Superintendent shall submit a final report to the Joint Legislative Education Oversight Committee by December 15, 2025. The final report shall include the following:

       (1)   An accounting of expenditures.

       (2)   The number and percentage of students enrolled in the school who participated in the Program, including demographic data for participating students.

       (3)   Student performance data in STEM related courses.

       (4)   How public school units would continue to use grant funds in the future if the Program were to continue beyond the 2024-2025 school year.

       (5)   Any recommendations by the Superintendent to modify the Program to be more effective at furthering the purpose of the Program.

SECTION 1.(g) It is the intent of the General Assembly to reauthorize this Program for the 2025-2026 school year.

SECTION 2.(a) Appropriation. – There is appropriated from the General Fund to the Department of Public Instruction the sum of one million dollars ($1,000,000) in nonrecurring funds for the 2023-2024 fiscal year to implement the provisions of this act. These funds shall not revert at the end of the 2023-2024 fiscal year, but shall remain available until the end of the 2024-2025 fiscal year.

SECTION 2.(b) Evaluation. – As a condition of receipt of grant funds, a public school unit shall designate both students who complete the grant-funded activities in the Common Education Data Analysis and Reporting System and a matched set of students with similar demographic characteristics who did not complete the grant-funded activities, when possible, in a manner directed by the Department of Public Instruction that will allow future analysis of outcomes for these students related to all of the following:

      (1)   Enrollment in STEM-related elective clusters in high school.

      (2)   Graduation from high school within four-years of entry.

      (3)   Enrollment in a post-secondary STEM-related major, degree program, or certificate program within three years of high school graduation.

      (4)   Completion of a post-secondary STEM-related major, degree program, or certificate program within six years of high school graduation.

      (5)   Employment in a STEM-related field within eight years of high school graduation.

The North Carolina Longitudinal Data System shall, in cooperation with all agencies with relevant data, report annually to the Joint Legislative Education Oversight Committee on the outcomes for both groups of students on each available data point beginning December 15, 2028, and ending December 15, 2039.

SECTION 3. This act becomes effective July 1, 2023.

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GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2023

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BILL DRAFT 2023-MTz-8 [v.3]

(THIS IS A DRAFT AND IS NOT READY FOR INTRODUCTION)
09/29/2022 02:34:51 PM

Short Title:	UNC Report on Computer Science Credit.	(Public)
Sponsors:		
Referred to:		

A BILL TO BE ENTITLED
AN ACT TO REQUIRE THE BOARD OF GOVERNORS OF THE UNIVERSITY OF
NORTH CAROLINA TO STUDY AND REPORT ON ANY DECISION MADE
REGARDING WHETHER TO INCORPORATE ONE OR MORE COMPUTER
SCIENCE COURSES INTO THE MINIMUM COURSE REQUIREMENTS FOR
UNDERGRADUATE ADMISSION FOR THE UNIVERSITY OF NORTH
CAROLINA SYSTEM, AS RECOMMENDED BY THE HOUSE SELECT
COMMITTEE ON ADVANCING WOMEN IN STEM.

The General Assembly of North Carolina enacts:

SECTION 1. The Board of Governors of The University of North Carolina shall study whether to incorporate one or more computer science courses into the minimum course requirements for admission as an undergraduate student at a constituent institution of The University of North Carolina. By March 1, 2023, the Board of Governors of the University of North Carolina shall report to the Joint Legislative Education Oversight Committee on the results of its study, including at least the following:

(1)   The advantages and disadvantages of incorporating computer science into the minimum course requirements for admission.

(2)   If applicable, how computer science has already been incorporated into the current minimum course requirements for admission.

(3)   Any decision made related to incorporating computer science into the minimum course requirements for admission. If no decision has been made, the Board's timeline for making a decision.

(4)   The rationale for any decision made, including the rationale for the timeline if a decision has not been made.

SECTION 2. This act is effective when it becomes law.