

Framing Clear Academic Pathways: The Curricular Coherency and Efficiency Project at Winston-Salem State University

Tanya E. Walker-Bethea, Cynthia Villagomez, Brenda A. Allen, and Carolynn Berry
Winston-Salem State University

This article delineates the process through which Winston-Salem State University (WSSU) initiated major curriculum reform across all undergraduate majors. Beginning in 2014, WSSU began measures to revise major pathways with the aim of increasing transparency and reducing uncertainties about program requirements and learning outcomes. Initial reviews of existing programs raised questions about program structure, relevance of some required courses, and obstacles for time-to-completion. To address these concerns, a committee of five faculty members and one senior administrator devised a 3-year plan to revise undergraduate major programs for clearer pathways in order to enhance student learning and program efficiency. This plan encompassed a conceptual framework that organized each program into three categories: foundation, breadth, and depth. The plan also included adjustments to the assessment tools used to measure student learning, resources available to faculty and staff, and processes for curriculum revision at the department level. The adopted framework not only allowed for the introduction, development, and mastery of knowledge and essential skills in each major but also permitted faculty to reshape the curriculum in terms of their teaching and research expertise. In this article, we outline the reform project's primary goals, steps taken to implement the 3-year plan, and the impact on undergraduate students' learning.

Winston-Salem State University (WSSU)—a mid-sized, southeastern, public, historically black institution with a liberal arts focus—has undertaken an ambitious, multi-year curriculum reform project. The Curriculum Coherency and Efficiency Project at WSSU is rooted in the idea that student performance is enhanced by an intentional framing of clear academic pathways consisting of general education, the major, and experiential learning activities. General education challenges students to a broad exploration of the arts, humanities, and sciences. The major, then, allows students to deepen their knowledge of a chosen area of study first exposed in general education. Experiential learning opportunities (e.g., internships and undergraduate research) support student learning through the application of knowledge to real-world situations. Collectively, these components contribute to the academic maturity that WSSU aims to instill into each student.

The Curriculum Coherency and Efficiency Project emerged after two key concerns with academic planning were identified. First, assessments of the impact of general education on student learning revealed a necessity for continued curriculum transformations at the major level. Although students were introduced to learning outcomes in general education courses, it was unclear how the practice continued or was assessed in major courses. The second concern involved the structure of major programs. A review of the academic catalog revealed inconsistencies with the organization of programs. Senior administrators cautioned departments against unclear pathways that (a) required so many credits that students had little to no opportunity for experiential learning, (b) complicated academic advising, and (c) negatively impacted time-to-completion. As such, the Curriculum Coherency and Efficiency Project was developed to combat these issues with the primary goal

to enhance students' learning experiences by providing a streamlined curriculum with heightened efficiency.

This article outlines the process for planning and implementing the Curriculum Coherency and Efficiency Project as a comprehensive restructuring of undergraduate studies to (a) increase faculty understanding and support of the project, (b) provide campus leaders with the tools and resources for ongoing curriculum reform at the department level, (c) provide a framework appropriate for programs in different disciplines, and (d) increase students' understanding and articulation of major expectations and outcomes. As such, in this article we highlight the collaborative measures taken to encourage the faculty's commitment to the project and to promote sustained student success through the retooling of academic pathways.

Background

The most recent reformation of general education provided the groundwork for the Curriculum Coherency and Efficiency Project. In 2010, WSSU adopted seven learning outcomes that each student must study and practice in general education: written communication, oral communication, critical thinking, critical reading, scientific literacy, quantitative literacy, and information literacy. All students are required to complete 60 credit hours (with nine courses focused on the learning outcomes specifically) of general education courses in the arts, humanities, and sciences. At the same time, academic programs were asked to revise their programs in order to reduce the number of major requirements to 60 credit hours past general education. However, some programs completed this task with no overarching framework, and problems arose when programs failed to scaffold required courses and/or simply

removed courses in order to fulfill the task. An absence of coherency in some majors became part of discussions about graduation rates, retention, and post-graduate preparedness as well as the need for intentionality in curricula structure.

In 2016, senior administrators developed a conceptual framework to present the major in three categories: foundation, breadth, and depth. They theorized that the collective set of courses coupled with experiential learning would produce a more prepared and competent graduate. According to Allen and Berry (2016), this framework would have a profound impact on teaching and learning. Faculty could scaffold the major around discipline-specific concepts and skills driven by trends in their disciplines, campus resources, and faculty expertise. Additionally, students would be able to identify an area of study that aligns with academic interests and professional aspirations.

In the new framework, *foundation* courses introduce students to a discipline and the skills needed for more advanced study beyond general education. These may include survey courses, research methods courses, writing in the discipline courses, and theory courses (Allen & Berry, 2016). To highlight the interdisciplinary nature of many fields, academic programs may require courses in other departments as a way to broaden students' initial understanding of a discipline and to assist students with developing essential skills like critical writing and public speaking. For instance, exercise science requires knowledge of biological sciences and the teaching program requires some background of developmental psychology. *Breadth* courses allow students to sample the discipline through an intensive study of chosen subfields. The subfields are determined by faculty expertise and considered significant to the discipline.

For example, the history major has chosen a geographical approach to the discipline and requires courses covering the United States, Asia, Europe, Latin America, and Africa.

A *depth* area of a major provides advanced study of a subfield and culminates with a capstone experience such as a research seminar course or an internship. These experiences are designed to challenge students' ability to explore big discipline-specific questions through a specialized lens. Depth courses also challenge students to demonstrate the integration of their deep content knowledge.

The timeline for the Curriculum Coherency and Efficiency Project coincided with WSSU's 2016-2021 Strategic Plan (WSSU, 2016), which includes curriculum coherency as a university goal (see Table 1). The project focuses on the intentional restructuring of undergraduate academic plans. According to Lattuca and Stark (2009), an effective, coherent curriculum academic plan is developed with four specific markers: (a) intended knowledge to be gained, (b) an appropriate sequencing of courses and knowledge, (c) proper instructional activities and resources, and d) assessment tools that lead to effective adjustments of the plan. As such, the plan remains fluid and can easily respond to discipline and employment trends as well as faculty expertise. Coherency, then, is essential to the ideas, plans, and implementations of a framework. The multi-year Curricular Coherency and Efficiency Project assisted the university with creating effective and efficient academic plans, beginning in the general education courses through the major program requirements. The goal of the revision was to have a curriculum that is more coherent and efficient and leads to advancements in the quality of student's learning and higher learning productivity.

Table 1
Timeline

When	Action
2016	The chancellor's strategic plan included a goal focused on "strengthening liberal education" and articulated nine objectives that underscore curricular and co-curricular avenues.
2016	Two senior administrators released a white paper (Allen & Berry, 2016) contextualizing continued academic reform in the major.
2017	The Curriculum Coherency Committee formed and developed an action plan for the project.
2017	WSSU was awarded a \$48,000 grant by the Teagle Foundation in support of implementing the proposed action plan.
2017-2018	The Curriculum Coherency Committee met monthly to make recommendations for updating and creating curriculum documents.
2018	The Curriculum Coherency Committee expanded from five members to 10 members and began working with individual academic programs.
2019	The provost launched a series of monthly curriculum meetings for department chairs.

Increase Faculty Support

To secure the faculty's commitment to the Curriculum Coherency and Efficiency Project, a number of actions were taken. After Allen and Berry (2016)'s white paper on curriculum coherency provided both the rationale and roadmap for achieving the objectives of the project, a committee comprised of 10 faculty members and representatives from Institutional Assessment and Research was charged with assisting academic programs in envisioning and designing curricula that would be coherent, integrated, and efficient both for students and the institution. Each degree program was assigned a team of two committee members who reviewed the curriculum outlined in the undergraduate catalog, looked at similar programs offered at comparable liberal education institutions, and reviewed relevant program accreditation guidelines. The teams then met with department chairs and curriculum committees (or the whole faculty) in consultant capacities. In the initial meetings with each degree program, the team members asked a series of questions aimed at encouraging faculty to think carefully about the ways they structured their curriculum and potentially effective approaches they might use to reframe coursework in order to more readily support the major learning outcomes. Example questions follow:

- How are the major program outcomes measured?
- Are the indicated prerequisites instrumental in adhering to course sequencing?
- What are the concepts (not courses) foundational to your major?
- What are the subdisciplines within your discipline to which your majors should be exposed?
- What are some areas where you might expect a student to take a deeper dive by taking an additional three to four courses?

Through this process, faculty remained aware of the future goals related to students' mastery of learning outcomes and, namely, to map each course to the major program student learning outcomes in Phase 2, and then to map the appropriate institutional student learning outcomes to the courses in Phase 3. These collaborations reinforced the idea that faculty are the primary contributors of student learning and, thus, were major stakeholders in the project and its success.

Additionally, faculty were asked to respond to the Stages of Concern questionnaire (Hall & Hord, 2020) annually. This tool allowed faculty to share their thoughts on the implementation of the Curriculum Coherency and Efficiency Project, ranging from the impact on faculty performance and the availability of necessary resources. In both 2017 and 2018, faculty expressed the most concern with potential changes to their teaching methods and

professional status. As a result, the Curriculum Coherency Committee, in tandem with senior administrators, implemented more training and public discussions so faculty could feel more comfortable with the project's impact. It was important for faculty to know that the project goals were not punitive but should be seen as opportunities to strengthen their individual professional development and the academic programs to which they were assigned.

Provision of Resources for Campus Leaders

The curriculum reform process was moved forward substantially due to increased institutional support from senior academic leadership. Specifically, they provided major support by encouraging the chairs' full and active participation in the process and by developing a protocol to offer additional practical support to all undergraduate degree programs. Department chairs were charged with ensuring their faculty's understanding of the project, completion of each phase, and collection of data on the project's impact on student learning and program viability. Monthly meetings between the Curriculum Coherency Committee and department chairs focused on detailed explanations of Academic Standards and Curriculum Committee (ASCC) forms and common errors to avoid, effective wording of major program outcomes, and the categorization/sequencing of required major courses. During department meetings, chairs assisted their faculty in making connections between the reform project and long-standing conversations related to searches for new faculty positions. Faculty were able to identify a variety of department needs for future hires and to schedule new hires to teach relevant existing courses listed in the undergraduate catalog that had rarely or never been taught due to lack of faculty expertise.

Feedback from chairs indicated that the additional leadership meetings helped them to understand the task they were charged to lead in their departments. At the end of the year, most academic programs had undergone at least one review with their assigned faculty facilitators, and some had submitted curriculum revisions to ASCC for approval. Throughout the process, some departments found that they could be more effective and efficient by reducing the number of major programs and instead offer more depth based on a similar set of foundation and breadth courses. For instance, there were separate majors in business administration, marketing, management, finance, and information systems. As all of these majors relied on the same business foundational and breadth courses, business administration became a single major with depth offerings in marketing, management, finance, or information systems. This approach not only presented

the major more coherently to students but also resulted in better utilization of faculty resources and less duplication of courses at lower levels.

During its assessment of the intentional and ongoing engagement with faculty and department chairs, the curriculum coherency facilitators concluded that the process was having positive effects. As presented at the Association of American Colleges and Universities and Teagle Foundation grant meetings in 2017 and 2018, facilitators noted the following developments as success markers:

- Faculty were discussing the scaffolding of classes to accomplish the outcomes, including new ways to pull undergraduate research or social justice themes across the major (in support of the WSSU mission).
- Faculty were reexamining student learning outcomes for the major when they realized that some courses did not support an outcome.
- Sixty-two percent of programs had engaged with the facilitators in a conversation about the curriculum and 44% had submitted some type of revision of the major curriculum to the university academic standards committee. Of those reviewed, 63% had reduced the number of required hours with the average required hours going from 52.9 to 44.4.

Standard Framework Across Disciplines

From the onset of the project, faculty raised concerns about implementing a standard curriculum framework in departments with program accreditations to consider. Education, social work, music, birth through kindergarten education (BKE), and nursing are a few of the undergraduate majors that struggled to balance the ideal minimum number of 120 credits for graduation with the content and skill requirements mandated by the accrediting agencies. For instance, BKE's previous academic pathway included 126 credit hours for graduation. In order to shave the extra six hours from their pathway, the BKE faculty members determined which courses offered duplicate content in the Department of Education or elsewhere on campus.

To assist departments with visualizing the curricular changes they were asked to make, documents required for program and course (re)development were revised or created by the ASCC. The form used to propose program changes was revised so departments could list previous requirements and propose new ones in the same table. Also, the form requires the signature of a member of the Curriculum Coherency Committee, indicating awareness of the changes and adherence to project guidelines. Additionally, the ASCC approved a template that could be used by all major programs,

including those with special discipline-related and accreditation requirements. This template allowed departments to lay out their curriculum in relation to the three project phases.

A new academic catalog format using foundations/breadth/depth as the standardized framework for all major degree programs was launched to further assist faculty in visualizing curriculum revisions. This new format was provided at the end of each academic year to each department chair and program coordinator by the Office of the Provost, which archives all documents approved by the ASCC and manages the publication of each updated catalog. The office also provided immediate support to chairs and program coordinators in using the new catalog standards to frame curriculum revisions. However, there is still a need to create an instrument that will provide clear indications of students' thoughts about their major expectations and outcomes at the time of their graduation.

Students' Articulation of Major Expectations and Outcomes

Our graduating seniors are given the UNC Graduation Survey, which is designed to allow for a reflection of the education they received. Specifically, four items are highlighted as germane to the Curriculum Coherency and Efficiency Project:

- A sufficient variety of courses and options to satisfy my general education requirements.
- A sufficient variety of courses and options to satisfy my major's requirements.
- During my times as a student, I understood what classes I needed to take to earn my intended degree.
- I can explain how my WSSU education translates to real-world skills.

Data collected between 2016 and 2018 indicate increased satisfaction with the number and types of courses from which students could select. Approximately 53% of students felt they were equipped with the proper tools to understand and articulate the relevancy of their academic programs (University of North Carolina System, 2019). This information allowed the university and, specifically, the Curriculum Coherency Committee to gauge the effectiveness of the project and its alignment to the strategic goal on student learning. Additionally, this information was shared with the faculty so they remained aware of the project's impact.

While the UNC Graduation Survey provided a broad spectrum of students' critiques and praises of their prospective curricula, it did not give the individual program results that would allow an assessment of specific academic

program changes that occurred. One way to resolve this gap is to design an instrument to be used by each undergraduate program after full implementation of its revised curriculum. As with the UNC system-wide survey, the proposed survey would question students' thoughts on course sequencing, understandability of the curriculum, and essential skills and learning outcomes pertinent to their major.

Next Steps and Positive Outcomes

The 2019-2020 academic year marked the final year of implementation with an extension of processes established previously. Ongoing monthly meetings with department chairs provided continuing assistance for accomplishing curriculum revision goals. Additionally, members of the implementation teams were available to work with individual programs that requested further guidance in attaining aims related to any of the three phases of the project. The planning and implementation committees continued working collaboratively with Institutional Assessment and Research to collect data for analysis and to determine further adjustments necessary for curriculum reform.

Thus far, one of the most positive curriculum coherence achievements is the Office of the Registrar's use of a degree audit program. The program shows general education and major course requirement completion to faculty advisors and each of the students in relation to the foundation/breadth/depth framework and institutional learning outcomes. Faculty and students now effectively use the language of this framework to discuss students' academic progress. However, there is still a need to create an instrument that will provide clear indications of students' thoughts about their major expectations and outcomes at the time of their graduation.

In terms of efficiency of faculty resources, another positive outcome relates directly to the success in cutting back on curriculum creep, which has enabled low-producing majors to attract and retain more majors. A final outcome involves the discussions taking place in departments that offer majors in which new depth areas could be aligned. For instance, faculty from biology, chemistry, justice studies, and psychology who had been team-teaching forensics courses met to discuss coordinating the creation of additional courses in their respective areas, which could also be used to develop new and enhanced depth areas in each major program.

Continuing collaborative efforts to improve students' interdisciplinary options remains a priority at WSSU. An additional consideration is an analysis of the impact on student learning, retention, graduation rates, student preparedness, and community engagement. As WSSU has a \$420,000,000 economic impact in the region, we must continue to produce students who are competent, well-skilled, and knowledgeable.

References

- Allen, B. & Berry, C. (2016). *Curricular coherency and efficiency project: Achieving a true liberal education curriculum at Winston Salem State University* [Unpublished white paper]. Winston-Salem State University, Winston-Salem, NC.
- Hall, G. E., & Hord, S. M. (2020). *Implementing change, patterns, principles, and potholes* (5th ed.). Upper Saddle River, NJ: Pearson.
- Lattuca, L. R., & Stark, J. S. (Ed.). (2009). *Shaping the college curriculum: Academic plans in context* (2nd ed.). San Francisco, CA: Jossey-Bass.
- University of North Carolina System. (2019). *UNC Graduation Survey*. Chapel Hill, NC: Author.
- Winston-Salem State University (WSSU). (2016). *Strategic plan 2016-2021*. Retrieved from <https://www.wssu.edu/strategic-plan/>

TANYA E. WALKER-BETHEA, PhD, is an Associate Professor of African American Literature and chair of the Department of English at Winston-Salem State University. Her recent research examines themes of migration in Gullah women's literary and cinematic arts.

CYNTHIA J. VILLAGOMEZ is Program Coordinator and Associate Professor of History at Winston-Salem State University. She previously served as Chair of the Department of History, Politics, and Social Justice. She teaches courses in ancient, medieval, near eastern, and world history, and leads the public history program. Her research focuses on Christian communities in late antiquity and Muslim-Christian relations in the early Islamic world.

BRENDA A. ALLEN, PhD, is the 14th—and first female—president of Lincoln University. She previously served from 2009-2017 as Provost, Vice Chancellor for Academic Affairs, and tenured Professor of Psychology at Winston-Salem State University. She also served as the Associate Provost and Director of Institutional Diversity at Brown University. Dr. Allen has worked as a Full Professor, Chair of the African-American Studies department, Assistant to the President and Director of Institutional Diversity, and Special Assistant to the Provost at Smith College. Her academic work explores the intersections of ethnicity, education, and student achievement with a special focus on African-American children.

CAROLYNN BERRY, PhD, is Senior Associate Provost at Winston-Salem State University. She previously served at WSSU as Interim Provost and Vice Chancellor for Academic Affairs; Assistant Provost for Planning, Assessment, and Research; Interim Dean of University College; Interim Dean

of the School of Graduate Studies and Research; Interim Dean of the College of Arts and Sciences; Interim Director of Enrollment Management; and Chair of the Department of Physical Education. She is a Professor of Exercise Science. Dr. Berry has authored and co-authored numerous academic articles in her academic discipline of exercise physiology, and on administrative issues such as institutional effectiveness, student retention, and

student learning outcomes assessment. Dr. Berry has also been the principal investigator of several funded grants, including a \$600,000 Mellon Grant for the Humanities.

Acknowledgements

The project was supported in part by a grant from the Teagle Foundation.