

RESPONSE TO CHARGE S-2204-2

"IMPACT OF COURSEATLAS"

Submitted to Executive Committee: November 20, 2024

DESCRIPTION OF CHARGE

Explore the impact of CourseAtlas to benchmark institutional goals of the system, on academic units and departments, on faculty work-life balance, and make recommendations as appropriate. Specifically, (i) Investigate to what degree CourseAtlas has achieved the goals it was designed and implemented to achieve, (ii) explore the impact of CourseAtlas on academic units and departments' ability to manage their own academic programs, (iii) assess the impact of CourseAtlas on the work-life balance of faculty, and (iv) propose feedback mechanisms which allow timely and meaningful faculty input on scheduling changes.

BACKGROUND

CourseAtlas is the name of a course scheduling application developed by the software vendor InfoSilem that has been in use at Rutgers University since 2020. The stated goal of adopting and implementing CourseAtlas was to facilitate the scheduling of courses, primarily in New Brunswick, in appropriate classroom spaces and at appropriate times that would ease student travel burdens (e.g., via the university bus system) and maximize the utility of classroom spaces of varying capacities. Per the original charge request to the Senate Executive Committee, CourseAtlas was intended to:

- 1. Reduce bottlenecks and course conflicts that impact our students' time-to-degree;
- 2. Decrease unnecessary course-related student travel, enabling our students to spend their time in class or studying, as opposed to on the buses;
- 3. Facilitate curricular planning by schools and departments, ensuring they can offer the courses they require in the appropriate sizes and in the appropriate classrooms;
- 4. Manage school and University enrollments by enabling growth in disciplines and areas where there is higher student demand;
- 5. Enable better institutional planning of instructional spaces to ensure our faculty and students are teaching and learning in high-quality classrooms.

Although CourseAtlas has been available for use by the scheduling offices in Camden and Newark, it is only utilized minimally on those campuses and thus is largely a New Brunswick application. Full history on the development and implementation of CourseAtlas at Rutgers is available online

at the website of the New Brunswick office of Academic Scheduling and Instructional Space: https://scheduling.rutgers.edu/courseatlas

The timing of CourseAtlas implementation was such that it become fully operational around the start of the coronavirus pandemic (spring 2020) and consequent "lockdowns," when Rutgers along with most other universities and colleges transitioned to 100% online instruction. Challenges from the use of CourseAtlas were relatively unknown until in-person instruction again became possible, but at that time concerns with the use of CourseAtlas arose quickly. Instructors noted that they were suddenly expected to teach at different times and using different classroom spaces from what they had come to expect, while schedulers (staff and faculty) noted that the system interface was complex and unwieldy and a poor replacement for the prior version – the Course Scheduling System, which is still in use at the Camden and Newark campuses.

The Faculty and Personnel Affairs Committee (FPAC) was first charged in March 2022 to investigate the impact of Course Atlas. After extensive discussion within the committee, a survey for instructors and staff was developed during fall 2023 with the support of staff from the Office of Institutional Research. The aim of the survey was to assess experiences with CourseAtlas in terms of impact on instructors and schedulers. A copy of the survey appears in the Appendix to this report. The survey was prepared using the Qualtrics online interface, and sent to all instructors and staff in the spring of 2024.

PARTICIPANTS IN THE COURSE ATLAS SURVEY

A total of 908 respondents completed the Course Atlas survey. Of these, 83% identified as faculty (40% tenure line, 26% non-tenure line, 15% lecturer, 1% graduate student instructor, 19% unidentified) and 17% identified as staff. The majority of respondents (77%) indicated a New Brunswick campus affiliation, with 14% connected to Newark, 6% to Camden, and 5% indicating multi-campus affiliation.

Participants reported on a variety of ways in which they engage in course scheduling processes:

- Assist with course scheduling for a department, school, or program: 13%
- Manage scheduling for a department, school, or program, and directly interface with CourseAtlas: 12%
- Manage scheduling for a department, school, or program, with no direct interface with CourseAtlas: 8%
- Teaching courses at times set by CourseAtlas: 37%
- Teaching classes with no awareness of how schedule is made: 31%

PERCEPTIONS OF COURSE ATLAS AMONG KNOWN USERS

Analyses of survey questions regarding experiences with Course Atlas first were limited to the following participants: those who indicated a New Brunswick campus affiliation, and those who indicated that they either manage scheduling and interface with CourseAtlas or teach courses at times set by CourseAtlas. This reduced our sample to 403 respondents. It is worth noting here that despite the broad use of CourseAtlas in the schedule process in New Brunswick, many faculty and staff do not directly engage with the application or are unaware of the extent to which the

application impacts their day-to-day duties. Therefore, this first set of analyses considered **only those respondents who were aware of their interactions/engagements with CourseAtlas**. It also should be noted that because faculty are at times involved in course scheduling (e.g., as undergraduate program coordinators), these analyses include both faculty and staff.

Among known users engaged in scheduling (n=128), perceptions of CourseAtlas generally were not positive. For example, most (64%) indicated that their overall impression of CourseAtlast was "very" or "somewhat" negative, while only 21% rated this as "very" or "somewhat" positive. Only 25% noted any agreement with the idea that CourseAtlas makes their job easier, while 58% expressed disagreement (48% expressed strong disagreement). Only 15% indicated that CourseAtlas makes scheduling more efficient while 61% disagreed with that statement. These trends persisted for statements regarding the ease of utilizing CourseAtlas to schedule faculty for courses at their preferred times or locations in that most schedulers did not believe CourseAtlas made these tasks easier.

Among known users engaged in instruction (n=295), perceptions of CourseAtlas were similarly negative. For example, 82% viewed CourseAtlas overall "very" or "somewhat" negatively, while only 7% viewed it as "very" or "somewhat" positively. Generally instructors also rated CourseAtlas as "very" or "somewhat" negative in terms of how it impacts their ability to access the classrooms they needed (75%), conduct research (60%), manage childcare (72%) or eldercare (62%) responsibilities, teach at times and locations where they feel safe (37%); and on student attendance (increasing tardies or absences; 64%).

PERCEPTIONS OF HOW COURSE ATLAS IMPACTS UNDERGRADUATES

Instructors were asked to indicate whether they had enough interactions with undergraduate students to assess the impact of CourseAtlas on the undergraduate experience; 217 instructors responded affirmatively. This set of respondents was then asked to evaluate the effects of CourseAtlas on undergraduates across a variety of indicators. Respondents were generally negative or pessimistic about CourseAtlas: most (63%) reported disagreement with the suggestion that CourseAtlas "provides students with a broad range of courses to choose from"; most (78%) reported that CourseAtlas did not reduce inter-campus travel time for classes; slight majorities (51%) did not think CourseAtlas could improve 4-year graduation rates nor improve perceived safety of scheduled class times. Only 7 respondents (3%) believed that CourseAtlas supports better class punctuality and attendance for students, and only 6 (3%) believed that CourseAtlas helps students with time management in their balancing academic and non-academic schedules.

EXPERIENCES AND SUGGESTIONS FOR IMPROVEMENT

Instructors also were given the opportunity to respond at length to open-ended questions about their experiences with CourseAtlas and offer suggestions about ways to improve CourseAtlas. Answers were varied and extensive and are provided in full as an Appendix to this report.

CONCLUSIONS AND RECOMMENDATIONS

Based on the responses to our survey, CourseAtlas is not meeting its original stated goals as far as instructors and course schedulers are concerned. Among instructors and staff, it is unpopular and creating more problems than it was implemented to solve. It is negatively impacting employees

who depend on it to teach their classes as well as employees who depend on it to schedule those classes. It will be important to understand how CourseAtlas is impacting students, and the Student Affairs Committee has been working on this charge as well. If student experiences mirror instructor and staff experiences, it seems likely that CourseAtlas should either be shelved and replaced, or dramatically revised, to meet the needs of the Rutgers New Brunswick community more effectively.

At minimum, we recommend the following:

- The office of Academic Scheduling and Instructional Space should immediately convene a task force comprised of instructors and schedulers in New Brunswick. The goal of this task force should be to review current CourseAtlas procedures and practices and make recommendations for revision or replacement within a rapid time frame (e.g., with rollout of new systems for fall 2025 courses). The composition of the task force should take care to ensure meaningful representation from instructors and staff schedulers, while also ensuring that the following groups also are included:
 - Students in New Brunswick, especially: 1) those who frequently utilize buses to get to class, 2) those on work-study assignments or otherwise involved in paid employment in order to secure funds for college costs, 3) those who maintain significant caregiving obligations while also enrolled as full-time students.
 - Instructors and staff schedulers who maintain significant caregiving obligations while working full-time at Rutgers.

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