Indiana University Classroom Pilot: Aligning Classrooms Scheduling with Teaching Approaches

In summer 2023, the Mosaic Initiative, in partnership with the IUPUI Registrar's office, invited 32 IUPUI faculty to participate in a classroom-scheduling pilot. Participating faculty were Senior Mosaic Fellows, IUPUI (Indiana University’s Indianapolis campus) instructors who had participated in the Mosaic Fellows Program, who had explored and implemented active-learning practices in traditional and active-learning classrooms. Having visited numerous classrooms in their tenure as Fellows, we believed these faculty to be ideal candidates for exploring how best to align teaching goals with the classroom selection process.

The pilot’s intent was to align teaching approaches with classroom design. Our prevailing questions in pilot were:

- Can faculty be scheduled in a classroom based primarily on teaching needs, rather than privileging proximity and precedence as the basis of a scheduling decision?
- What would a scheduling process based on teaching needs look like?
- What language would faculty choose to communicate their choice of classroom?
- By what process should the chance to choose a classroom be communicated to faculty?
- How might such a process change the workload of other stakeholders (Office of the Registrar, Department Schedulers, Faculty, etc.) involved in class scheduling?
- What are the primary challenges in the process, and how would we address them if this process were scaled beyond the pilot group?

Survey Logistics

An Internet-delivered Qualtrics survey asked faculty for the details of their classes (size, time, etc.) and to use an online database of available classrooms to identify first-choice and second-choice selections for the rooms they would like to teach in. The survey also asked participants for their rationale in choosing the rooms that they did, as a key goal was to identify the language faculty would use in describing their desired rooms. (The full survey and results are available in the appendices.)
The survey was submitted to the IU IRB in June 2023. Participants received an initial email in mid-July, and two more reminder emails followed before the survey closed in late August 2023 for spring 2024 scheduling. After responses were collected, the survey-generated spreadsheet was shared with the Registrar, who worked to align respondents’ requests with their other scheduling needs.

Results

Fourteen faculty members from eight different academic units participated in an initial pilot, instructors with ranks from lecturer and assistant clinical faculty to tenured professors and directors of centers and institutes. Three additional faculty members expressed a desire to participate but were not teaching for the targeted semester, resulting in a total response rate of over 50%.

Useable room requests resulted from each participant’s submission, with no conflicts in requested times/day. A surprising degree of consistency emerged among requests, despite the many departments represented. Two patterns are notable.

1. Every submission mentioned furniture and space:

   “I like to engage students in many small group activities and discussions. Having the ability to reconfigure the room will allow for that to be easier. Additionally, the multiple dry erase boards will allow for group breakout activities. With just one screen and one dry erase board I am limited in most classrooms. Additionally, the fixed or heavy furniture of other classrooms (and tight space) make it challenging for students to move around and engage with each other.” –Teaching Professor, Healthcare Management
“Having the instructor in the center of the room will allow for engagement with all students with the case examples used throughout the course. I believe this classroom style will allow for better interactions with students both with the instructor and with each other.” –Lecturer, Forensics

2. The next most frequent request was the ability to share and display student work:

- “White boards and surrounding technology, coupled with chairs that move for easier peer groups” –Director, Indigenous Studies

- “[The ability] to interact with students who are coding and need to work on a team. They can share their screens easily and that includes with me. I can also see everyone on the same level.” –Lecturer, Computer Science

- “Movable desks, displays on the walls” –Associate Professor, English

Challenges

Participation was challenging for some respondents, largely due to the timing of our survey. First, many faculty did not check email over the summer (due to nine-month contracts or other summer projects), meaning they may not have had the opportunity to see the survey in time to participate. Next, not all instructors knew what courses they would be teaching two semesters later (in spring 2024), making it difficult to speculate on what classrooms they might wish to request.

Next Steps

This initial pilot indicates that teaching preferences can be used effectively when assigning rooms. Faculty were excited to have a chance to participate and expressed enthusiasm that the pilot was in progress. The pilot proved to streamline processes for the Registrar.

We will move forward with the pilot for summer 2024 and fall 2024, investigating ways to make the process smoother for instructors and other stakeholders. Once classrooms are assigned for

“I suspect it actually saved me time. I’m happy to have this information. ... these [requests] fit in easily with that [assignment] process.” –Registrar officer
spring 2024 rooms, we will survey faculty for feedback on their experience and interview the Registrar and other stakeholders for theirs.

Regardless of the scope of study follow-up, this pilot suggests that aligning classroom assignments with teaching approaches can be feasible, reliable, and achieved with relatively low investment. It would seem there is promise in such an approach, with benefits accruing to instructors, students, and staff members alike.
Appendix 1: Survey Fields

Page One: Fellow Information
Name: ________________________
Department: ________________________

Page Two: Course Information
Course Name: ________________________
Course Number: ________________________
Course Section: ________________________
Enrollment Capacity: ________________________
Meeting Days:

Mon     Tue     Wed     Thu     Fri
Meeting Times: ________________________

Page Three: First-Choice Room Information
Two-Character Campus Building Code (codes available at link): ________________________
Room Number: ________________________
What specific features of the room will you utilize to facilitate active learning?
________________________________________________________________________________________
________________________________________________________________________________________
What activities will you be able to implement in this specific room that are challenging in other classroom designs?
________________________________________________________________________________________
________________________________________________________________________________________

Page Four: Second-Choice Room Information
Two-Character Campus Building Code (codes available at link): ________________________
Room Number: ________________________
What specific features of the room will you utilize to facilitate active learning?
________________________________________________________________________________________
________________________________________________________________________________________
What activities will you be able to implement in this specific room that are challenging in other classroom designs?

_____________________________________________________________________________________________________________________________
_____________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________
## Appendix 2: Survey Results

### First-Choice Requests

<table>
<thead>
<tr>
<th>Requested room</th>
<th>What specific features of the room will you utilize to facilitate active learning?</th>
<th>What activities will you be able to implement in this specific room that are challenging in other classroom designs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES 117</td>
<td>Tables grouped in 4s, screens at each table grouping, whiteboards</td>
<td>Group work, problem solving</td>
</tr>
<tr>
<td>NU 112</td>
<td>The main reason for selecting this room is the size. A big component of this course is preparing the students for the licensure exam they will take after graduation. We combine the two sections of [the class] together for at least 7-8 weeks of the semester for interactive content review to prepare them for the licensure exam.</td>
<td>This is a standard classroom - no specific features other than the size and movable desks. We combine two sections of this course for 7 or 8 weeks each semester and need a room to hold at least 100. The movable desks are important because we have students work in small groups on problem solving activities, case studies, memory recall activities, and more. We also use Top Hat during these combined weeks for practice answering nursing licensure exam style questions. This allows me to see where they are knowledge-wise and then discuss the rationale for each question as we go.</td>
</tr>
<tr>
<td>ES 117</td>
<td>Movable desks, displays on the walls</td>
<td>Lots of discussion, collaborative writing, small group explorations of technology</td>
</tr>
<tr>
<td>IO 102</td>
<td>Having the instructor in the center of the room will allow for engagement with all students with the case examples used throughout the course. I believe this classroom style will allow for better interactions with students both with the instructor and with each other.</td>
<td>Throughout my lectures I like to include students in the conversation, encouraging them to ask questions, and talk to each other. In a stadium seating lecture hall, it is difficult to walk throughout the room and not being able to hear students when they ask questions. The design of this classroom will allow for better physical space for students to be heard, as well as the instructor to interact with the students on a more level atmosphere.</td>
</tr>
<tr>
<td>Course</td>
<td>Description</td>
<td>Observation</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>RG 1035</td>
<td>Multiple dry erase boards and the ability to reconfigure the seating with the movable tables/chairs.</td>
<td>I like to engage students in many small group activities and discussions. Having the ability to reconfigure the room will allow for that to be easier. Additionally, the multiple dry erase boards will allow for group breakout activities. With just one screen and one dry erase board I am limited in most classrooms. Additionally, the fixed or heavy furniture of other classrooms (and tight space) make it challenging for students to move around and engage with each other.</td>
</tr>
<tr>
<td>LE 104</td>
<td>Students can face each other and where all the screens are located.</td>
<td>I will be able to do a lot of group work, which is very important for health science students. I will also be able to do more active learning and workstations.</td>
</tr>
<tr>
<td>LE 104</td>
<td>I like how the tables are placed. This allows the students to work together easier. I also like there are more screens around the room.</td>
<td>This allows group work a lot easier for students. I normally teach where I lecture for 15 mins and then break students into groups to work on an active, topic, workstations, etc.</td>
</tr>
<tr>
<td>ES 1117</td>
<td>There are individual &quot;stations&quot; accommodating six groups allowing for a shared screen.</td>
<td>I have a virtual exchange with Poland students occurring during this class. The individual stations will allow students to engage in breakout rooms as a group versus having individual virtual &quot;windows.&quot;</td>
</tr>
<tr>
<td>LE 104</td>
<td>The ability for students to work in a group at a table and for me to share my screen on the big screen. Also that the lecture podium is in the middle of the room and I can see everyone and engage with them better.</td>
<td>To interact with students who are coding and need to work on a team. They can share their screens easily and that includes with me. I can also see everyone on the same level.</td>
</tr>
<tr>
<td>IT 273</td>
<td>Group activities, sharing student work on the board or the computer screens on the wall.</td>
<td>Students are naturally divided into groups by the tables.</td>
</tr>
<tr>
<td>IP118, IP231, BS3015, BS3006, ES2104, ES2107, ES2110</td>
<td>Easy group set up 10 to 12 groups of 4 students each.</td>
<td>75% of the class is based on group discussion. Flip charts or whiteboards available for each team is a nice to have.</td>
</tr>
<tr>
<td>CA 008F</td>
<td>White boards and surround technology, coupled with chairs what move for easier peer groups.</td>
<td>Moving groups around to different boards and the tech itself!</td>
</tr>
</tbody>
</table>
# Second-Choice Requests

<table>
<thead>
<tr>
<th>Requested room</th>
<th>What specific features of the room will you utilize to facilitate active learning?</th>
<th>What activities will you be able to implement in this specific room that are challenging in other classroom designs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LE 104</td>
<td>Although this room is a little bigger than my class size, this is my favorite room = 9 tables of 6, plenty of configurations for group work, large grid screen at front of room, individually controlled computers at each table grouping</td>
<td>Group work, problem solving, group presentations</td>
</tr>
<tr>
<td>CA 137</td>
<td>Movable desks, displays on the walls</td>
<td>discussion, collaborative writing, small group tech exploration</td>
</tr>
<tr>
<td>IP 118</td>
<td>This classroom allows for students to work in groups and collaborate. The course uses cases studies for students to engage with the content and work together to determine best practices used. Students can easily turn toward each other, work and talk to each other.</td>
<td>With large enrollment courses there is not an easy way for students to talk to each other and work together on projects. Stadium seating makes it difficult for students to be heard in class and for the instructor to engage with the students. This classroom will allow for a more effective environment for both the students and the instructor.</td>
</tr>
<tr>
<td>NU 110</td>
<td>Similar to what I wrote for [my other class] - this room has multiple dry erase boards, multiple screens and easy to move furniture.</td>
<td>The same activities as described [above].</td>
</tr>
<tr>
<td>ES 1117</td>
<td>Students face each other. I do worry it might not be big enough... if it's not then BS 2003</td>
<td>Group work and workstations</td>
</tr>
<tr>
<td>ES 1117</td>
<td>I like the set up of tables and screens</td>
<td>This classroom allows for easy of group work for students, share the screen to making the actives easier. Having this type of classroom fits my style of teaching, I may only lecture for 15 mins break them into groups for a bit and then I go back to lecture etc.</td>
</tr>
<tr>
<td>ES 1117</td>
<td>I can engage with the students and the students are able to be in teams and use the moving desk to work as groups of different numbers</td>
<td>engaging with students easier and having the students work in different size groups. As well as sit close to a monitor to see coding languages.</td>
</tr>
</tbody>
</table>