

Pre- and post-installation studies at Northview High School confirms node transforms the traditional classroom

This case study was made with an educational furniture piece made by Steelcase to promote mobility and flexibility in the classroom. The product is called the Node chair. According to their website “The Node school chair is mobile and flexible. It’s designed for quick, easy transitions from one teaching mode to the next, unlike traditional school desks and chairs.”

Classroom research

SES is a dedicated group within Steelcase created, essentially, to “go back to school”: to partner with educational institutions in order to develop active learning solutions that solve for the realities of teaching and learning today. Through these partnerships, and as a part of its commitment to human-centered design, SES works directly with educational professionals and students, conducting extensive discussions and research to obtain insights from the front lines about what’s needed and what actually works in day-to-day classroom use. During the research, SES performed trend analysis, ethnographic study, photography and interviews in more than 35 classrooms at 12 different schools and universities, and the consultants’ observations led to important insights. They found that most classrooms act as a barrier to collaborative learning rather than a tool for learning under the demands of today’s teaching pedagogies. Multiple teaching modes are necessary to support multiple learning styles, but classrooms generally do not support easy transitions from one mode to the next.

They documented many examples:

- Moving the desks from rows into groups to allow group collaboration or discussions
- Sitting in a previous class configuration
- Sitting in a distance from the instructor and from each other and keeping the first rows empty as a further barrier
- Looking over other student’s heads or backs to see the instructor, a media screen or a speaker.

- Stretching or arching backs uncomfortable against a rigid seatback during long class discussion periods.
- Sitting on desks or turning sideways in their chairs while participating in conversations or group discussion.
- Putting laptops on their laps because the tablet arm chair is not side enough.
- Piling personal belongings on the lap or floor.

A new solution

It was clear that a new solution was needed, and that it needed to support a variety of learning modes—lecture, large group discussion, small project groups, and presentation. The class had to be able to convert quickly and conveniently from one configuration to the next. Students needed to be positioned so that everyone could be seen and heard, and instructors needed to be able to see and reach every student.



NODE: FOR THE MANY MODES OF LEARNING



High school students say node makes a difference

Students in a dedicated advanced English classroom at Northview High School in Grand Rapids, Mich., found the node chair improved both their learning experience and their comfort in class.

What they said about how node affects the learning and classroom experience:

- 80% improves concentration and focus
- 97% improves overall classroom experience
- 98% improves group work
- 98% easy to move into different activities

What they said about how node affects their comfort level in class:

- 76% enough horizontal work surface
- 95% easy to use laptop
- 97% armrest provides enough support
- 98% more comfortable easy to adjust work surface easy to get in and out
- 99% backrest provides enough support like the look

N=68 students