Measuring the implementation and impact of student-centered learning: Teachers' experience and attitudes.

The EDC/NMEF Student-Centered Learning (SCL) Questionnaire for Teachers 2016

Education Development Center, Inc.

EDC is a nonprofit organization that creates and delivers effective programs, services, materials, and products to improve learning and teaching, health and human development, and economic opportunity for people of all ages worldwide. Collaborating with both public and private partners, we strive for a world where all people are empowered to live healthy, productive lives. EDC is committed to education that builds knowledge and skill, makes possible a deeper understanding of the world, and engages learners as active, problem-solving participants. While the issues we address are diverse, all that we do is united by our conviction that learning is the liberating force in human development. Founded in 1958, EDC currently employs 1,200 staff in the United States and around the world, including teachers, health and social science professionals, mathematicians, professional development experts, scientists, researchers, and management and technology specialists.

Nellie Mae Education Foundation

The Nellie Mae Education Foundation is the largest philanthropic organization in New England that focuses exclusively on education. The Foundation supports the promotion and integration of student-centered approaches to learning at the high school level across New England—where learning is personalized; learning is competency-based; learning takes place anytime, anywhere; and students exert ownership over their own learning. To elevate student-centered approaches, the Foundation utilizes a four-part strategy that focuses on: building educator ownership, understanding and capacity; advancing quality and rigor of SCL practices; developing effective systems designs; and building public understanding and demand. Since 1998, the Foundation has distributed over $210 million in grants. For more information about the Nellie Mae Education Foundation, visit
 www.nmefoundation.org.

Background

In 2010, the Nellie Mae Education Foundation (NMEF) launched the District Level Systems Change (DLSC) initiative, an effort to establish, sustain, and expand student-centered learning (SCL) in a select set of public school districts in the New England region. The initiative aimed to support sites in their efforts to accomplish the four SCL core components:

1. Extend learning beyond the four walls of the school and beyond the traditional school day, school week, and school year

2. Engage students in authentic tasks that improve the acquisition of 21st century knowledge and skills

3. Build a system in which learners' progress would be measured by demonstration of proficiency, not credits or seat time

4. Incorporate youth leadership and youth voice in determining the "what" and "how" of learning, and support students in shaping their own pathways toward college or career

These core components have evolved in NMEF's recent funding strategy and are now represented as four tenets of student-centered learning: personalized learning, competency-based learning, anytime/anywhere learning, and student-owned learning." (To learn more, visit http://studentsatthecenterhub.org/interactive-framework/.)

Central to NMEF's change strategy was the view that progress in improving student engagement and student achievement depended on sites' willingness and capacity to implement each of the four core components together or through careful staging over a period of three to six years. The foundation was encouraging systemic change, not small-scale programs.

As part of this effort, NMEF awarded a grant to EDC to evaluate the implementation and impact of the initiative's core components as they are articulated in the foundation's DLSC Logic Model. The aim of the evaluation was to provide NMEF and the participating DLSC sites with accurate and timely information about each site's progress in achieving the outcomes envisioned in the Logic Model and proposed in the site's annual work plan. Key among these outcomes was the effect of DLSC investments on teaching and learning in participating high schools.

One of the principal components of the evaluation was the annual administration of a teacher questionnaire in each of the high schools. This questionnaire, developed by the EDC evaluation team in consultation with NMEF research and program staff, was wide in scope (to match the breadth of SCL interventions across the sites) yet grounded in school and classroom practices (to provide empirical support for NMEF's ideas). The questionnaire was designed to work alongside other evaluation

instruments—a classroom observation protocol and interview protocols for central office and school level administrators, teachers and counselors—to provide an annual snapshot of SCL implementation in each of the sites and, over time, to create a rich set of trend data for the DLSC initiative.

Creating the Questionnaire

To create the original questionnaire, the EDC evaluation team conducted an extensive review of the literature on student-centered learning, competency-based learning, proficiency-based learning, and standards-based learning, and collaborative culture as this literature appeared in 2010. The team also reviewed existing questionnaires and analytic frameworks that addressed the major topics identified by NMEF in its change strategy.

These included a draft version of the Innovative Teaching and Learning questionnaire, the 2009 PISA Student Questionnaire, the Horizon Institute LSC Teacher Questionnaire (HRI LSC Teacher Questionnaire 1997), the Research Assessment Package for Schools (RAPS), the Quantifying Student Engagement Research Report (by the National Center for Student Engagement), and the Stanford CRC Questionnaire. (We acknowledge our debt to the developers of each of these instruments and analytic frameworks.)

> **The team developed the first DLSC teacher questionnaire in 2010 and administered the questionnaire in DLSC schools for the next five years. During that time, the questionnaire was administered in 23 schools in 11 DLSC districts with over 2000 respondents.**

Building on this review and in close consultation with NMEF, the team developed the first DLSC teacher questionnaire in 2010; piloted the questionnaire with local high school teachers to determine its clarity, technical functionality, and capacity to measure underlying constructs; made indicated adjustments; and then administered the questionnaire in DLSC schools for the next five years. During that time, the questionnaire was administered in 23 schools in 11 DLSC districts with over 2000 respondents.

The team repeated the development process in 2015, expanding the literature review to include college and career readiness, deeper learning, continuous improvement, growth mindset, and academic tenacity. Relying on a thorough review of the original teacher questionnaire and the results it generated, the EDC team developed a revised and expanded version (appended to this document) for use in Phase 2 of the DLSC initiative. Here, we acknowledge our debt to recent literature on these topics, including contributions by Sandra Park, Eleanor Duckworth, and Carol Dweck.

The Structure of the Questionnaire

The 2016 DLSC teacher questionnaire contains 20 items and 98 sub-items, organized into five sections.

Section 1

Individual Background Information, 6 items:

1. School identification
2. Subjects taught
3. Gender
4. Race/Ethnicity
5. Years taught
6. Grade level(s) taught

These items provide essential identifying information to support disaggregation of data.

Section 2

Involvement in DLSC Activities and Impact on Instruction and Assessment, 7 items:

7. Teacher rating of personal involvement in efforts to enhance SCL
8. Teacher rating of impact on instruction
9. Teacher rating of impact on student engagement and college and career readiness
10. Teacher rating of impact on what/when/where/and from whom students learned
11. Teacher rating of preparation to support student learning that requires (5 sub-items):

   • Collaboration
   • Personalization
   • Critical Thinking or Problem Solving
   • Student Self-regulation and Academic Tenacity
   • Anytime/Anywhere Learning

12. Teacher rating of frequency of instruction that requires (5 sub-tems):
    - Collaboration
    - Personalization
    - Critical Thinking or Problem Solving
    - Student Self-regulation and Academic Tenacity
    - Anytime/Anywhere Learning
13. Teacher ranking of importance of various assessment methods (11 sub-items)

Section 3

School Support and Collaborative Culture, 2 items:

14. Teacher rating of school support for various student-centered practices (10 sub-items)

15. Teacher rating of practices that foster collaborative culture (12 sub-items)

Section 4

Instructional Practice, 3 items:

16. Teacher ranking of importance of various instructional activities (15 sub-items)
17. Teacher ranking of total teaching time devoted to various instructional activities (15 sub-items)
18. Teacher rating of frequency of various student learning activities (15 sub-items)

Section 5

Teachers' Professional Development, 2 items:

19. Teacher attitudes about their professional development (4 sub-items)
20. Teacher professional development experiences (6 sub-items)

Using the Questionnaire

The survey is designed to be administered electronically to high school teachers in schools (or school districts) that have embraced some or all of the four core components of SCL identified by NMEF:

1. Anytime/Anywhere learning

2. Acquisition of 21st century knowledge and skills

3. Proficiency-based instruction and learning

4. Student voice and leadership

In the DLSC evaluation, EDC sought questionnaire responses from all classroom teachers in each participating high school. Questionnaire results were not used to track individuals' responses across years.

The DLSC questionnaire was designed to be administered electronically. Access to an online version of the questionnaire is available at a cost negotiable with Education Development Center.

Contact:

SCLquestionnaires@edc.org
617-618-2978

> **The survey is designed to be administered electronically to high school teachers in schools (or school districts) that have embraced some or all of the four core components of SCL**

The EDC/NMEF Student-Centered Learning (SCL) Questionnaire for Teachers 2016

Measuring the implementation and impact of student-centered learning: Teachers' experience and attitudes.

Welcome to the EDC/NMEF Student-Centered Learning (SCL) Questionnaire for Teachers

This questionnaire is intended to provide teachers' perspective on the implementation of student-centered learning at your school. Student-centered learning includes learning that is more personalized (taking account of student interests and needs) and student- owned (inviting greater student voice), that can take place anytime/anywhere (inside or outside of school; before, during or after the school day), and that measures progress based on students' demonstration of proficiency, not just the hours they sit in class.

Your responses will help your school or school district better understand characteristics of instruction and student learning in your school. References to "student-centered learning" throughout the questionnaire refer to your experiences in your school with Anytime/Anywhere learning, Proficiency-based learning, and Personalized learning, all or some of which may be part of your school's effort to ensure that students are prepared for college and career.

The questionnaire should take no more than 20 minutes to complete. Participation in the questionnaire is voluntary, all responses are confidential, and all data from the questionnaire will be reported in the aggregate.

Thank you for helping us gather this important information.

Individual Background Information (section 1 of 5)

1. What is the name of your school?
   - ○ (School #1)
   - ○ (School #2)

2. What subject(s) do you currently teach? (Check all that apply)
   - ○ ELA
   - ○ Mathematics
   - ○ History/Social Studies
   - ○ Science
   - ○ Art
   - ○ Foreign Language
   - ○ Physical Education
   - ○ ELL or ESL
   - ○ Special Education
   - ○ Other (please specify) _____

3. Are you male or female?
   - ○ Male
   - ○ Female

4. Please indicate your race/ethnicity
   - ○ American Indian or Alaskan Native
   - ○ Asian or Asian American
   - ○ Black or African American
   - ○ Hispanic or Latino/Latina
   - ○ Native Hawaiian or Other Pacific Islander
   - ○ White or European American
   - ○ Two or more races

5. How many years have you taught including the current school year?
   - ○ 0–1
   - ○ 2–5
   - ○ 6–10
   - ○ 11–20
   - ○ more than 20

6. Indicate the grade level or levels that reflect the majority of your teaching during this school year.

   ○ 9th

   ○ 10th

   ○ 11th

   ○ 12th

Involvement in District SCL Activities and Impact on Instruction and Assessment (section 2 of 5)

7. To date, how much involvement have you had in the {district} initiatives to enhance student-centered learning (e.g. Anytime/Anywhere learning, Proficiency-based learning, and Personalized learning)?

	NO INVOLVEMENT	MINIMAL INVOLVEMENT (Occasional Meetings or Infrequent PD)	MODERATE INVOLVEMENT (Regular Meetings or Frequent PD)	SUBSTANTIAL INVOLVEMENT (Leadership Role in your Department, School or District)
I have had	○	○	○	○

8. How much impact do you believe the {district} initiatives to enhance student-centered learning (e.g. Anytime/Anywhere learning, Proficiency-based learning, and Personalized learning) have had on your instruction in the past year?

	NO IMPACT	MINIMAL IMPACT (Minor changes in tasks, activities or classroom discourse)	MODERATE IMPACT (New approaches to tasks, activities, and classroom discourse)	SUBSTANTIAL IMPACT (Fundamentally re-shaped how I teach and what I expect of students)
They have had	○	○	○	○

9. How wide an impact do you believe the {district} initiatives to enhance student-centered learning (e.g. Anytime/Anywhere learning, Proficiency-based learning, and Personalized learning) have had on student engagement and/or college and career readiness this past year?

	NO IMPACT	MINIMAL IMPACT (a few students)	MODERATE IMPACT (many students)	SUBSTANTIAL IMPACT (most or all students)
They have had	○	○	○	○

10. How wide an impact do you believe the {district} initiatives to enhance student-centered learning (e.g. Anytime/Anywhere learning, Proficiency-based learning, and Personalized learning) have had on what, when, where, and from whom students learned in the past year?

	NO IMPACT	MINIMAL IMPACT (a few students)	MODERATE IMPACT (many students)	SUBSTANTIAL IMPACT (most or all students)
They have had	○	○	○	○

11. Given the work of the {district} initiatives to enhance student-centered learning (e.g. Anytime/Anywhere learning, Proficiency-based learning, and Personalized learning) over the past year, *how well prepared do you now feel to support student learning that*:

	Not at all prepared	Minimally prepared	Adequately prepared	Very well prepared
REQUIRES COLLABORATION (students interact with peers as part of classroom learning, rely on help and support from classmates to complete assignments, and/or receive and use feedback from peers to revise work)	○	○	○	○
REQUIRES PERSONALIZATION (students have input on the design and goals of classroom learning, have personalized pathways to college/career readiness, have choice over how to demonstrate proficiency, and/or work at their own pace to master content)	○	○	○	○
REQUIRES CRITICAL THINKING OR PROBLEM SOLVING (students work on tasks with no single correct answer, apply previously learned content to new problems and new contexts, and/or support ideas with evidence)	○	○	○	○
REQUIRES STUDENT SELF-REGULATION AND ACADEMIC TENACITY (students have opportunities to demonstrate persistence, assess the quality of their own work as they proceed, and/or modify their approach when faced with obstacles to achieving long-term goals)	○	○	○	○
REQUIRES ANYWHERE/ANYTIME LEARNING (students participate in learning outside the school day/school building, e.g. blended learning, flipped learning, virtual learning, and/or ELOs, such as internships or service learning)	○	○	○	○

12. In your classroom over the past year, *how often did you provide instruction that*:

	Never	Occasionally	Often	All the time
REQUIRES COLLABORATION (students interact with peers as part of classroom learning, rely on help and support from classmates to complete assignments, and/or receive and use feedback from peers to revise work)	○	○	○	○
REQUIRES PERSONALIZATION (students have input on the design and goals of classroom learning, have personalized pathways to college/career readiness, have choice over how to demonstrate proficiency, and/or work at their own pace to master content)	○	○	○	○
REQUIRES CRITICAL THINKING OR PROBLEM SOLVING (students work on tasks with no single correct answer, apply previously learned content to new problems and new contexts, and/or support ideas with evidence)	○	○	○	○
REQUIRES STUDENT SELF-REGULATION AND ACADEMIC TENACITY (students have opportunities to demonstrate persistence, assess the quality of their own work as they proceed, and/or modify their approach when faced with obstacles to achieving long-term goals)	○	○	○	○
REQUIRES ANYWHERE/ANYTIME LEARNING (students participate in learning outside the school day/school building, e.g. blended learning, flipped learning, virtual learning, and/or ELOs such as internships or service learning)	○	○	○	○

13. Of the assessment methods listed below, please indicate the three that are most important for assessing student proficiency in your classes. Indicate the methods you would rank as the first, second, and third most important.

	1st most important	2nd more important	3rd most important
Traditional quizzes or tests	○	○	○
Portfolio submissions and accompanying rationale	○	○	○
Classroom participation	○	○	○
End-of-course or end-of-term exams	○	○	○
Extended (more than a week long) individual projects	○	○	○
Extended (more than a week long) collaborative projects	○	○	○
Daily homework and daily check-ins	○	○	○
Student writing (essays, reports, etc.)	○	○	○
Journals, Lab books or Notebooks	○	○	○
Student presentation to class	○	○	○
Student presentation at a public event or to a panel of students, teachers, administrators and/or community members	○	○	○

School Support and Collaborative Culture (section 3 of 5)

14. Based on your experiences during this school year, to what extent does your school support the following (Check one box in each row).

My school supports:	Not at all	To a small extent	To some extent	To a great extent
a. alternative pathways to graduation	○	○	○	○
b. efforts to personalize instruction to meet student needs	○	○	○	○
c. student participation in extended learning opportunities (ELOs) for credit	○	○	○	○
d. the use of instructional technology to personalize and advance student learning	○	○	○	○
e. the expectation that all students can reach high standards	○	○	○	○

My school supports:	Not at all	To a small extent	To some extent	To a great extent
f. students in regulating their own learning and setting their own pace	○	○	○	○
g. the use of multiple measures of student performance to assess mastery and to determine whether/when students advance to more challenging content	○	○	○	○
h. students in setting and meeting long term goals	○	○	○	○
i. student voice and leadership	○	○	○	○
j. the use of clearly articulated student proficiencies to guide student learning within and across subjects	○	○	○	○

15. Based on your experiences during this school year, to what extent to you agree or disagree with the following statements? (Check one box in each row).

Most teachers in my school:	Strongly disagree	Disagree	Neutral or mixed	Agree	Strongly agree
a. have similar ideas about how students learn	○	○	○	○	○
b. are familiar with each other's teaching goals	○	○	○	○	○
c. are familiar with each other's classroom practices	○	○	○	○	○
d. have a shared vision of effective instruction	○	○	○	○	○
e. have similar ideas about how student work should be assessed	○	○	○	○	○
f. ask for assistance from one another	○	○	○	○	○
g. share teaching strategies with each other	○	○	○	○	○
h. believe we share responsibility for the success of all our students	○	○	○	○	○
i. have opportunities to observe one another teach	○	○	○	○	○
j. want to be observed by other teachers	○	○	○	○	○
k. work together to review student work or student data to inform instruction	○	○	○	○	○
l. work together to plan curriculum and/or instruction	○	○	○	○	○

Instructional Practice (section 4 of 5)

16. Please rate the following instructional activities for how important they've been to your instruction in this school year. (Check one box in each row.)

	Unimportant	Minimally important	Quite important	Most important
a. lead a class of students doing an investigation or activity that demands complex reasoning or problem solving	○	○	○	○
b. provide instruction through extended formal presentation/lecture	○	○	○	○
c. facilitate a whole-class discussion where students present ideas or give/receive feedback	○	○	○	○
d. organize and facilitate a *student-led* activity	○	○	○	○
e. provide students with in-depth guidance on the content or organization of their work	○	○	○	○
f. answer procedural questions about individual or group work and/or help students stay on task	○	○	○	○
g. ask open-ended questions to promote engagement with big ideas	○	○	○	○
h. give written feedback on student work	○	○	○	○
I. give oral feedback on student work	○	○	○	○
j. have students explore alternative methods for solving problems/conducting investigations	○	○	○	○
k. modify or adjust instruction based on informal classroom assessments	○	○	○	○
l. model for students how to approach a problem or task	○	○	○	○
m. use technology to personalize instruction	○	○	○	○
n. differentiate activities or instruction to meet individual students' needs	○	○	○	○
o. make connections between content and/or activities and students personalized learning plans of pathways	○	○	○	○

17. Of the instructional activities described above, which three take up most of your teaching time (inside class) over the course of a typical week? Select the three activities that take up first, second, and third most time.

	First Most	Second Most	Third Most
a. lead a class of students doing an investigation or activity that demands complex reasoning or problem solving	○	○	○
b. provide instruction through extended formal presentation/lecture	○	○	○
c. facilitate a whole-class discussion where students present ideas or give/receive feedback	○	○	○
d. organize and facilitate a *student-led* activity	○	○	○
e. provide students with in-depth guidance on the content or organization of their work	○	○	○
f. answer procedural questions about individual or group work and/or help students stay on task	○	○	○
g. ask open-ended questions to promote engagement with big ideas	○	○	○
h. give written feedback on student work	○	○	○
i. give oral feedback on student work	○	○	○
j. have students explore alternative methods for solving problems/conducting investigations	○	○	○
k. modify or adjust instruction based on informal classroom assessments	○	○	○
l. model for students how to approach a problem or task	○	○	○
m. use technology to personalize instruction	○	○	○
n. differentiate activities or instruction to meet individual student's needs	○	○	○
o. make connections between content and/or activities and students personalized learning plans or pathways	○	○	○

18. When participating in your class, how often have students engaged in the following types of activities during this school year: (Check one box in each row)

	Never	Rarely	Sometimes	Often	Every day
a. participate *student-led* discussions or activities	○	○	○	○	○
b. participate in discussions led by the teacher	○	○	○	○	○
c. listen to teacher presentation/lecture	○	○	○	○	○
d. make formal presentations to the class	○	○	○	○	○
e. work together in pairs or small groups on an assigned task	○	○	○	○	○
f. work individually on an assigned task	○	○	○	○	○
g. explain their reasoning or defend a position orally or in writing	○	○	○	○	○
h. answer textbook/worksheet questions	○	○	○	○	○
i. work on solving a real-world problem or conducting hands-on experiments	○	○	○	○	○
j. design or implement their own investigations or research projects	○	○	○	○	○
k. write reflections on progress	○	○	○	○	○
l. work on materials for a portfolio	○	○	○	○	○
m. engage in performance assessments involving teachers and peers	○	○	○	○	○
n. take notes	○	○	○	○	○
o. incorporate feedback into their work	○	○	○	○	○

Teachers' Professional Development (section 5 of 5)

19. Thinking about professional development opportunities over the past year, to what extent do you agree with the following statements? (Check one box in each row)

	Strongly disagree	Disagree	Neutral or mixed	Agree	Strongly agree
a. I feel that I have many professional development opportunities focused on student-centered learning.	◯	◯	◯	◯	◯
b. I am interested in pursuing professional development opportunities focused on student-centered learning.	◯	◯	◯	◯	◯
c. in my school, I am encouraged to experiment with my teaching.	◯	◯	◯	◯	◯
d. I am satisfied with the opportunities I have for professional development.	◯	◯	◯	◯	◯

20. Thinking about your professional development activities over the past year, to what extent is each of the following statements true? (Check one box in each row)

	Not at all	To a small extent	To some extent	To a great extent
a. I am involved in planning my professional development.	◯	◯	◯	◯
b. I am encouraged to develop an individual professional development plan.	◯	◯	◯	◯
c. I am given time to work with other teachers as part of my professional development.	◯	◯	◯	◯
d. I am given time to reflect on what I have learned and how to apply it to my classroom.	◯	◯	◯	◯
e. I receive support as I try to implement what I have learned.	◯	◯	◯	◯
f. I am receiving the professional development I need to implement student-centered learning practices in my classroom.	◯	◯	◯	◯

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Thank you for taking this survey!