



Berkman

The Berkman Center for Internet & Society
at Harvard University

Bringing Mindsports into the Classroom and Beyond: A Workshop on Curriculum Design and Civic Education

Workshop Summary and Proposed Action Items

I. Introduction

On June 13th, 2012, Harvard Law School Professor Charles Nesson and Public Radio Exchange Lead Software Developer Rebecca Nesson convened an interactive workshop focused on incorporating ‘strategic games’ and ‘games of skill’ into teaching practices. Working closely with mindsport masters, including experts in Chess, Draughts (10 X 10 Checkers), Poker, Bridge, and Go, the day’s conversations were action-oriented, with the goal of mapping a plan for the development of a novel curriculum aimed at teaching mindsports in libraries and schools. Participants included members of the Harvard Law School Library, the Berkman Center for Internet & Society, and the MIT Media Lab, as well as representatives of the United States Mind Sports Association.

While the sessions yielded a number of promising ideas for potential action items, as an immediate next step attendees coalesced around a proposal offered by Joi Ito, Director of the MIT Media Lab, for a Development Sprint aimed at brainstorming, prototyping, and road-testing a mindsport curriculum.¹ The event would bring together developers, scholars, mindsport masters, students, and teachers at a local school to produce a template for leading groups in mindsport play, supported by an online teaching kit consisting of initial teaching resources. Participants would also map a set of clear activities aimed at making the development and teaching event replicable in other settings and accessible to instructors from various backgrounds and skill levels. The Sprint would build upon June 13th conversations by focusing on implementation; that is, how, practically, to teach strategic thinking and life skills via games to diverse students across varied environments, communities, and contexts.

II. Summary of Central Takeaways and Proposed Action Items

1. “The Big Idea”: Development Sprint

2. Developing a Mindsport Curriculum for Students

¹ *About the MIT Media Lab:* The MIT Media Lab applies an unorthodox research approach to envision the impact of emerging technologies on everyday life—technologies that promise to fundamentally transform our most basic notions of human capabilities. Unconstrained by traditional disciplines, Lab designers, engineers, artists, and scientists work atelier-style, conducting more than 350 projects that range from neuroengineering, to how children learn, to developing the city car of the future. Lab researchers foster a unique culture of learning by doing, developing technologies that empower people of all ages, from all walks of life, in all societies, to design and invent new possibilities for themselves and their communities. [<http://www.media.mit.edu/about>]

- 2.1 Building a “Toolbox” of Skill Sets Through Games
- 2.2 Incorporating “Mini-games” Into the Class Curriculum

3. Additional Proposals

- 3.1 Creating a World Mindsport Play Day
- 3.2 Hosting Community Game Night for Students
- 3.3 Building a Mindsport Network
- 3.4 Developing a Little League for Mindsports

Appendices:

Appendix 1: Agenda from July 13th Event (Harvard Law School)

Appendix 2: Chess Skill Set (Toolbox Proposal)

III. Open Questions, Key Issues and Challenges

As participants discussed proposals for developing an innovative curriculum aimed at bringing mindsports into libraries, schools and other centers of learning, they agreed that any next steps must account for a number of open questions, key issues, and challenges, including:

- (1) *Mindsports as Strategic Games.* A key challenge is highlighting the potential for the development of strategic thinking through learning mindsports. Participants and experts agreed that learning mindsports offers a number of educational, skills-building, and other benefits to students and players that are applicable in real-world situations. These benefits should be made explicit and emphasized.
- (2) *Diverse Learners and Instructors.* Participants noted the importance of developing teaching resources and curricular modules that can account for various teaching styles and learning abilities, be tailored to each student’s educational needs, provide instruction at several levels of skill, expertise, and experience, and be adaptable to diverse learning environments.
- (3) *Lack of Familiarity with Mindsports.* Some participants flagged the importance of overcoming perceptions of certain mindsports as old-fashioned or outdated. In particular, teachers and librarians recommended accounting for the ‘cool factor’ that can make such games appealing to a younger audience by linking them more closely with the skills and strategies underlying online games and other popular youth trends. How can unconventional or less familiar mindsports become popularized?
- (4) *Public Perceptions of Mindsports.* In a related concern, participants underscored the importance of precise framing for any outputs associated with the effort, particularly regarding the objectives of a mindsport curriculum (e.g. teaching students skills that have educational, emotional, intellectual and economic benefits that go beyond mindsport cooperation and competition; instilling students with new forms of confidence and authority by giving them a strategic seat at the table). Critical to any teaching strategy must be a conceptual framework that accounts for all of the games that fall under the mindsports umbrella, and guards against the potential dominance of poker. Attendees recommended a bundled approach to any next steps—that is, promoting all the mind

sports together, in a “box”—in a literal sense, with all the games packaged together; in a scholastic sense, with the mindsports curriculum being developed as a whole; and in the virtual sense, online.

- (5) *Organizational Challenges*. Participants noted a number of organizational challenges that potentially impede the teaching of mindsports, including: space constraints, funding, the ability of people others than masters to teach, funding, community support, and parental engagement.

IV. Central Ideas and Action Items

In a mix of plenary sessions, smaller group discussions, lightning talks, and instructed play, attendees surfaced a number of action items related to curricular design and teaching that were fleshed out and built upon throughout the day. In addition to the Development Sprint, promising ideas included: engineering a “skills toolbox” associated with playing mindsports and incorporating mindsport “mini-games” into classroom curriculum. For each idea, the group sought to address the open questions, key issues, and challenges outlined in Section II above and to ensure that each proposal aims to:

- Develop a strong curriculum that incorporates a variety of mindsports
- Utilize safe spaces to create healthy playing environments for students
- Ensure community support, including buy-in from teachers, parents, and administrators
- Put forth criteria measuring success

1. “The Big Idea”: Development Sprint

In the mid-morning session, Media Lab Director Joi Ito put forth the seed idea that generated a great deal of enthusiasm and widespread support among workshop attendees. The proposal centers on bringing together diverse stakeholders, including students, researchers, masters of mindsports, teachers, and librarians to rapidly envision, prototype, and develop the initial modules for a mindsports curriculum. During the three-day event, the group would also outline the conceptual framework underlying such an effort, and seek to map a clear outreach, implementation, and rollout strategy. In partnership with a local school, the MIT Media Lab would help convene the group and facilitate the development process, with support of members of the Berkman Center.

1.1 Goals

The primary goal of The Development Sprint is to develop, test, and hone initial modules for a curriculum for the teaching of mindsports, starting with Dominos, Poker and Chess, and moving onto bridge, Go, and Draughts. The event will culminate with an evening of educational play for parents, staff, and students.

The Sprint should produce an online teaching kit consisting of at least an instructional video and a clear plan for making the teaching event replicable in other settings. Participants will also

consider opportunities and models for effectively bridging online and offline play in the teaching environment; that is, what is the best use of technology including sophisticated online graphics and/or nimble computer play, and how can it be leveraged to enhance the benefits of face to face learning?

The focus will be not only on teaching the games themselves, but also on ways to support effective teaching by librarians and instructors. Working with faculty and administrators, in addition to graduate students and others, this toolkit could then be piloted in area schools, local libraries, and other arenas, where it can be tested, refined, and built upon. Students will also be engaged in the curriculum development process and inform approaches to teaching teachers and fellow students. In parallel, similar Development Sprints focused on proto-typing modules for other strategic games could be hosted.

1.2 Format

The Development Spring will gather approximately 10-15 participants for a 1-3 Day Hackfest-style event in which teams form around projects and produce concrete deliverables at the end of the event. Participants will include both novices and experts, in order to breakdown the assumptions underlying each game, distill them to their core, and translate and reconstruct those observations into a curriculum or other teaching resource or tool.

Based on the ideas and goals generated at the June 13th meeting, we would like teams to focus on projects including:

- (1) Development of a teaching curriculum for particular mindsports, including one or more mini-games that distill the essential strategic aspects of the game and a teaching video.
- (2) Taking the chess curriculum to the next level, whatever that may be, using the creative thinking and building skills of Maurice Ashley² and the Media Lab.
- (3) Envisioning and planning a world Mindsports Play Day where different age groups are encouraged to play together in order to maximize the benefits of intra-family, inter-generational play.

² See Appendix 2: Chess Skill Set (Toolbox Proposal) by International Chess Grandmaster Maurice Ashley

**Appendix 1:
Agenda from July 13th Event (Harvard Law School)**

**Bringing Mindsports into the Classroom and Beyond:
A Workshop on Curriculum Design and Civic Education**

Cambridge, MA
Wednesday, June 13, 2012

led by
Professor Charles Nesson
Founder and Co-Director, Berkman Center for Internet & Society
Rebecca Nesson
Lead Software Developer, Public Radio Exchange

AGENDA

Introduction

Building on recent educational trends that have sought to incorporate ‘strategic games’ and ‘games of skill’ into teaching practices, this workshop will focus on developing a novel curriculum for teaching “mindsports”-- such as Dominos, Draughts (10 X 10 Checkers), Chess, Bridge, and Poker-- to diverse students across varied environments, communities, and contexts. Taught by outstanding competitors and designed to help learners develop intuitive thinking processes and skills, this innovative curriculum will employ various teaching styles and learning abilities, provide instruction at several levels of expertise and experience, and be adaptable to diverse learning environments. Resulting curricular models will help students to develop skills that have educational, emotional, intellectual and economic benefits, applicable not only to mind sport cooperation and competition, but beyond.

The day’s events will be led by HLS Professor Charles Nesson. Also participating will be members of the Harvard Law School Library, the Berkman Center for Internet & Society, and the MIT Media Lab, as well as representatives of the United States Mindsport Association. All participants share an interest in “learning through games.” We will use the workshop to envision a strategy for developing school and after school curricular materials as well as associated online tools and resources, such as customizable syllabi and tutorials with masters. Key to roll out and implementation will be the development of guidance for new instructors, including teachers and librarians, on methods and tools for teaching mindsports in the classroom.

Throughout the day, we will investigate the connection between these practical activities and the future of civic education. How can being a strategic thinker or a ‘player in the game’ transform understandings of citizen engagement? Our goal is to enrich active citizenry and its instruction through a curriculum geared towards learners in traditional and non-traditional venues, including classrooms, libraries, and other centers of civic engagement and participation.

Format and Central Objectives

The day will be highly interactive and participatory. Moderators for each session will engage speakers and other workshop participants in discussion across multiple formats: lightning talks, roundtable and plenary discussions, working sessions, and organized play. Dialogue, provocation, and reflection will be encouraged throughout the day.

After a brief introduction, the morning sessions will begin with short lightning talks, followed by a roundtable discussion with Masters of key mindsports, including 10x10 Checkers, Bridge Chess, GO, and Poker. Each speaker will offer a vision of how to teach her sport, ideally from the perspective of the endgame ('the simplest thing first'). This will set the stage for the working sessions, in which mixed groups of students, scholars, designers, and developers will come together with masters to brainstorm tools, practices, online forums, and other means of teaching each sport to diverse groups of learners and students.

The afternoon sessions will focus on the curriculum implementation strategy, specifically examining the Future Public Library as a central venue for innovative teaching and learning. We will discuss the transforming nature of the public library and its potential as a platform for online and offline communities connecting diverse teachers, students, and other learners with experimental curricula. We will consider the potential of libraries as hubs for innovative civic education and engagement practices, and its role in the development of new community literacies. The day will culminate with an evening of mindsport game instruction and practice.

Our hope is that this workshop will lay the foundation for a collaboration that aims to create innovative teaching modules and tools, roll them out via face-to-face meetings and trainings, and push them to new audience and diverse students by projecting them through libraries and schools.

Agenda

Wednesday, June 13th

Location:

Milstein East C, [Wasserstein Building](#),
Harvard Law School, 1583 Mass Ave

8:30 - 9:00 AM **Breakfast and Registration**

9:00 - 10:00 AM **Introduction and Overview of the Day**
Charles Nesson, Berkman Center for Internet & Society
Rebecca Nesson, Public Radio Exchange

The opening session will introduce the 'meta-strategy' driving the convening of the workshop. Rebecca Nesson will outline the curriculum

proposal and the connection between bringing mindsports to diverse students via schools and libraries and civic education: How can we teach citizens to be “players in the game”? Charles Nesson will then describe the path of the day and introduce Anthony Holden, who will act as the MC for the workshop. Nesson will then pick up the civic education theme with a kick-off discussion on: “What is quintessentially American?”

10:00 - 11:15 AM

Lightning Talks: An Introduction to Masters of the Games

Moderator: Anthony Holden

Participants:

Alex Mogilyansky, 10x10 Checkers

Howard Weinstein, Bridge

Maurice Ashley, Chess

Andy Okun, GO

James McManus, Poker

11:15 -11:30 AM

Break

11:30 - 12:30 PM

Roundtable Discussion

Moderator: Anthony Holden

Discussant: Joi Ito, MIT Media Lab

Joined by Joi Ito, the Director of the MIT Media Lab, the Masters from the previous sessions will engage one another and the audience regarding creative learning and curricular approaches to the teaching of mindsports across varied formal and informal environments and formats. Participants will be invited to share their views on novel resources and tools, potential venues for reaching out to new students, teachers, and learners, and concrete opportunities to translate instruction and practice into curriculum design.

12:30 - 1:30 PM

Food-For-Thought Working Lunch

Clusters of participants will start to hash out the contours of curriculum design. The goal will be to brainstorm and consider what tools might be brought to bear on the teaching of each sport to diverse learners across online and offline venues. Each group will be tasked with taking initial steps towards the development of the curriculum, its projection into diverse learning environments, and possible connection points with the practice and principles of civic education and engagement. Driving questions will be provided, and participants will be asked to assemble into groups.

1:30- 2:00 PM

Report out from Food-For-Thought Working Groups

Facilitator: Charles Nesson, Berkman Center for Internet & Society

A representative from each of the working groups will share central outputs from their brainstorming session, including: ideas for curriculum and teaching design; recommendations for roll-out, including strategy and venues of focus; connections to civic engagement and education. The resulting roadmap will inform our final discussion and provide the basis for a design collaboration.

2:00 - 3:15 PM

Strategic Games in Libraries and Schools

Facilitator: Rebecca Nesson, Public Radio Exchange

In this session, we will consider the notion of the library as the center of, and hub for, diverse community literacies that embrace both digital and offline learning. Reflecting on the morning sessions and our focus on innovative educational practices and new areas of interest, such as strategic thinking, we will invite a conversation regarding the potential of libraries and schools as a platform for reaching out to new audiences and students, and driving novel approaches to civic education practice.

Related Resources:

[Libraries are Obsolete](#), Trailer, April 18, 2012.

Nicholas Carr, [Library of Utopia](#), *Technology Review*, May/June 2012.

[Salman Khan: Let's use video to reinvent education](#), Ted Talk, March 9, 2011. (*Also see: Khan Academy*)

James McManus, [What Poker Can Teach Us](#) *The Chronicle Review*, October 5, 2009.

Zadie Smith, [The North West London Blues](#), *The New York Review of Books* (blog), June 2, 2012.

3:15 - 3:30 PM

Break

3:30 - 4:00 PM

The Olympic Vision: Mindsport as Nonprofit Institutional Organization

Moderator: Charles Nesson

Participants:

John Boulter, United States Mind Sports Association; United States Poker Federation

Amy Handelsman, United States Mind Sports Association; United States Poker Federation

Thomas Hsiang, Edmund A Hajim School of Engineering and Applied Sciences, University of Rochester; Go Association; International Go Federation; International Mind Sports Association

This interactive session will carry forward the hopes and concerns for mindsports as an element in the civic construction of local community with an olympic vision.

Location:

Milstein East B, [Wasserstein Building](#),
Harvard Law School, 1583 Mass Ave

4:00 - 5:45 PM **Mindsport Instruction**
Leader: Charles Nesson

Members of the librarian community and Berkman Center Interns are invited to participate in this practice-oriented session which will focus on Poker I: One Card War.

6:00 - 7:00 PM **Dinner**

7:00 PM **Play**

Location:

Harvard Law School Library Reading Room

Appendix 2: Chess Skill Set (Toolbox Proposal)

Initial ideas for a comprehensive **list of desired skill sets** for student mindsport players composed by International Chess Grandmaster Maurice Ashley (other grandmasters would compile similar lists for their respective games):

Think Before You Move Chess Initiative

Purpose: The goal of Think Before You Move (TBYM) is to teach critical thinking and life skills to young people through the medium of chess. These skills will prepare students to better approach problems, strengthen their personal discipline, counter negative peer pressure and exhibit greater self-control. Learning the skills through chess will also help enhance the students' self-esteem as well as promote success in the classroom, the workplace and their personal lives.

Methodology: The methodology is to use chess to teach important life precepts. While studying and learning a number of important chess positions and exercises, the class will openly discuss the connection between the critical thinking skills used in chess and the essential principles for success in school, career and beyond.

The following is a list (and brief description) of the themes of the twenty-two lessons.

Topics and Skills taught:

1. Decision-Making (The art of making decisions under varying degrees of pressure)
2. Consequences (Analyzing a decision's multiple effects on the future)
3. Personal Responsibility (How to identify, see fundamental reasons for, and quickly address mistakes)
4. Options Thinking (How to seek out multiple possibilities as a force of habit)
5. Thinking Out Loud (How to practice articulating the cognitive and emotional reasons behind each move)
6. Empathic Thinking (How to consistently see situations from the opponent's point of view)
7. Emotional Control (How to deal with strong feelings before, during and after a game)
8. Big Picture Thinking (Learning to see all parts of a situation before proceeding)
9. Deferred Gratification (How present sacrifices impact future success)
10. Planning and Preparation (Mapping the often tortuous connection between planning, preparation and success)
11. Focusing on the Endgame (Learning to embrace distractions while focusing on the finish line)
12. Respect for the Opponent (Understanding the genius in your competition, the art of true listening)
13. Timing (Establishing the pace of each operation, the art of being patiently aggressive)
14. Weaknesses (How a single weakness can impact the long-term success or failure of an entire operation)
15. Strengths (Learning to identify and use one's true assets)
16. Flexibility (Cultivating the readiness-for-change mindset when a superior plan seems ready to supersede an entrenched one)

17. Losing (how to use it as a learning experience, how to become stronger through loss)
18. Winning (How to maintain focus and stay hungry and humble when things are going well)
19. Self-Esteem (Managing the negative effects of winning and losing)
20. Illusions (Learning to see through and beyond the obvious).
21. Personal Empowerment (Why smaller is often be more effective than bigger)
22. Cooperation (Why team-think often works better than me-think)