



Contemporary Issues in Health

Service Learning Fall 2019 - Boston Brakers
Michael Parrish & Carter Dizes

Presentation Overview

- Introduction to the Brakers
- Discipline Perspective
- Community Analysis
- Plan of Action
- Measuring Impact
- Plan for Sustaining
- Conclusion





Introduction to the Brakers

What exactly is power soccer?



Who are the Boston Brakers?

- The first power wheelchair soccer team started in Boston
 - Sport created in 1970s
 - USPSA formed in 2006¹
 - Brakers started in the summer of 2012
- Weekly practices at the Tobin Community Center
 - Strong community ties and support in Mission Hill and Roxbury
- Approximately 10 athletes and 1 coach on the team
- Putting more priority and awareness on the social lens of disability compared to the medical lens of disability

Here's the team!



Areas for involvement as volunteers

- The team relies on the continued support of donors, sponsors and volunteers
- As service-learning volunteers we...
 1. Help build up and take apart chairs for practice
 2. Support the athletes in transitioning to soccer chairs
 3. Setup and run drills and scrimmages during practice
 4. Talk with the athletes, give advice and help facilitate a welcoming and competitive environment



Discipline Perspective

Bioengineering Perspective

- Exposure to medical device design and identifying + addressing a patient or end user's needs
- Healthcare accessibility and equity
- Inclusive of multiple, diverse perspectives
- Human-centered design



Math and Finance Perspective

- Fundraising needs
- Marketing
- Turnover of volunteers



Perspective as athletes

- Form close ties as a team and as friends
- Playing sports gets you physically active and helps you stay healthier
- Sports develop personal skills, goal-setting and sense of achievement²
- Playing recreational activities and being on team/community linked to improved mental health and social integration³





Community Analysis

Makeup of the Community

- Athletes from all over the Boston area
- Disabilities that limit physical strength and mobility
 - Spinal cord injuries
 - Cerebral Palsy
 - Muscular Dystrophy
- Primarily adults, both male and female, between 25-60 years old



Community Setting

- Weekly practices at the Tobin Community Center
- Part of 'Boston Centers for Youth and Families'
 - Organization that serves and enhances communities specific needs
- Mission Hill and Roxbury neighborhoods



Benefits of Adaptive Sports

- Competitive sports are shown to improve the mental well-being of people with physical disabilities⁴
- Exercise is an additional important feature providing physical health benefits
- Camaraderie: The team benefits from bonding with each other. Enhanced personal relationships and social interactions
- Linked to improved self-care and acceptance of disability³

Community Goals

- 1. Improve the current team for competition
- 2. Grow the number of teams and players in the Boston area
- 3. Develop a strong and cohesive New England Power Soccer Conference in order to facilitate the growth of power soccer in the region. In doing so, foster the experience of competitive sport, teamwork, & sportsmanship for those who have rarely experienced it.⁵

-Boston Brakers Mission Statement

Root Cause for Social Problem

- Excessive cost barriers to access adaptive sports
 - Chairs cost upwards of \$7,000
- Not many opportunities available for disabled populations to access recreational activities, sports and new hobbies⁶
- Lack of knowledge and awareness in unaffected communities and groups



Focus on accessibility and awareness

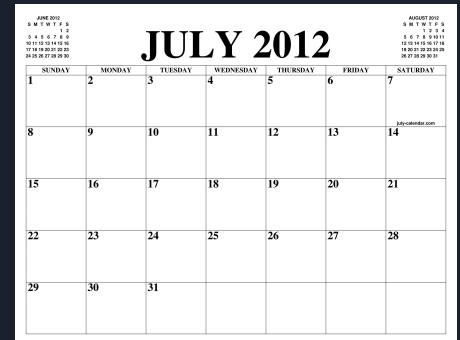
- “For those who have rarely experienced it”
- Prioritizing the social disability lens over the healthcare disability lens
- Improving access for people with disabilities to partake in recreational activities, hobbies and meet new people



How can we help change perspectives on the social disability lens?

Growth of power soccer in Boston

- Formed summer 2012
- Moderate growth, looking for more players
- Team has about 10 regular members
- More teams have followed in the Brakers footsteps, allowing more athletes to access this sport



SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



Community Assets

- **Players, coaches and organizers**
 - Jim Wice, Jim Farrow and others put in great effort to this team
- **Tobin Community Center**
 - Doesn't charge for gym usage
- **Technology**
 - Power Wheelchairs, Slack messaging, marketing tools
- **Strong connections in local neighborhood**
 - Sponsors, partnerships, donors and volunteers
- **8 years as a premier power soccer team and community**
 - USPSA and local neighborhoods continued support

Community Constraints

- Facility is not always reliable
 - Although free, they sometimes lose gym practice times at the last minute
- Volunteers are not consistent
 - Time upfront to train on how to work with the chairs and rules
- Athletes have varying skill levels
 - Compounded with limited tournaments and opportunities
 - Skill discrepancies can lead to lower athlete retention
- Financial and logistical challenges
 - Power wheelchairs are very user specific, and expensive
 - Planning and paying for transportation takes effort



Plan of Action

Plan of action should help address athlete skill development and accessibility

- **Skills Checklist**

- Passing
- Dribbling
- Speed
- Shooting
- Awareness (Spacing)
- Communication
- Defending (Without Fouling)
- Knowledge of tournament game rules

- **Coaching Resources**

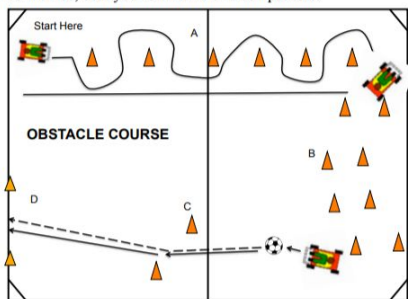
- Create a document to deliver to the Brakers team
- Coaching advice and tips
- Definition, goals and diagram of specific drills for practices
- Make this accessible to the whole team to inform what the entire team wants out of each practice

Coaching resources examples

OBSTACLE COURSE

Equipment: 14 - 18 cones, ball, any number athletes

- 1) Set course as shown below.
 - a) Set 8 cones lengthwise down court, approx 1.5 meters apart.
 - b) Set 6 cones along the 3-point line, 3-4 on each side about 2 meters apart
 - c) Set the ball and 2 cones as shown below
 - d) Set goal area as shown
 - 3) Line the athletes at the beginning of the course.
 - 4) Players go forward through the slalom, in reverse along the 3 point line, forward to drive the ball through the goal and cross goal to finish.
 - 5) Time entire course until athlete passes goal line
 - a) if athlete hits cone, add 5 seconds to clock
 - b) if athlete misses goal, add 5 seconds to clock
- LESSON: Great introductory drill for new athlete clinics.
Do it twice, beat your own time or a competitors!



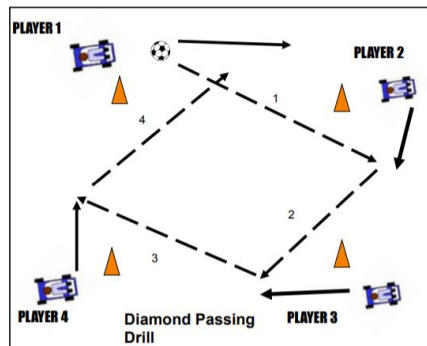
DIAMOND PASSING DRILL

Equipment: 4 cones, ball, minimum of 4 athletes

- 1) Set athletes and cones as shown below
- 2) Player #1 begins pass with ball movement aim south of player #2
- 3) Player #2 captures pass and continues the pass west of player #3
- 4) Player #3 captures pass and continues pass north of player #4.
- 5) After making pass, player moves to position of player he passed to.
- 6) Play continues until desired number of rotations are completed.

Lesson: accuracy in passing, and in receiving

Variation: Change direction of drill



HAVE A PRACTICE PLAN



GOAL SETTING

Additional ideas for improvement

- Marketing promotion and raising awareness of the Brakers
 - Donors, sponsors, volunteers and potential athletes who may want to join!
 - Currently, a business class group is tackling this
- Increasing donors and sponsors may assist with financial barriers
 - Increase quality and quantity of chairs available
 - Improve transportation and tournament options for players





Impact and Plan for Sustaining

Measuring Impact

- **Have athletes set goals for themselves each season**
 - Can tangibly track improvement and work toward a specific milestone
- **Informal discussions and feedback at practice**
 - Conversations at the end of every practice to build team chemistry and keep improving
- **Utilize Slack to improve practices and track progress**
 - Allows for digital and remote team communication and organization
- **End of service-learning meeting and feedback**
 - See how we as volunteers did, how it can be better in the future and share our thoughts with the Brakers

Plan for sustaining

- Increase retention of volunteers
- Curate lists of crucial skills for athletes
 - Provide a skills checklist to work on during practices
 - Provide a crash course to new players so they aren't overwhelmed during their first practices
- Generate agendas to be used in practices
 - Improved planning and input from athletes can improve athlete accessibility to the sport and overall retention
- Include reflections of what worked well, what didn't
 - Have this accessible to future volunteers, groups and organizers





Conclusion

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- The Brakers provide an opportunity for people with disabilities to play sports
 - Access to the physical, mental and social benefits that come with this
- Balance between the social and medical disability lens
 - Both aspects are important and should be prioritized
- Hope to continue this growth and awareness for disabled communities, leading to a more equitable and fair future with opportunities for people of all varying abilities

References

- [1] USPSA. USPSA | The Evolution of Power Soccer. *USPSA*.
<https://www.powersoccerusa.org/about/history>. Accessed November 20, 2019.
- [2] Ries E. The competitive edge of adaptive sports. *APTA*.
<http://www.apta.org/PTinMotion/2019/6/Feature/Competitive-Edge-Adaptive-Sports/>. Accessed November 20, 2019.
- [3] Barfield JP, Malone LA. Perceived exercise benefits and barriers among power wheelchair soccer players. *J Rehabil Res Dev*. 2013;50(2):231–38.
<http://dx.doi.org/10.1682/JRRD.2011.12.0234>.
- [4] Puce L, Marinelli L, Girtler NG, et al. Self-perceived psychophysical well-being of young competitive swimmers with physical or intellectual impairment. *Perceptual And Motor Skills*. 2019;126(5):862-885. <https://doi.org/10.1177/0031512519865849>.
- [5] Boston Brakers Power Soccer Club. <http://bostonbrakers.com>. Accessed November 20, 2019.
- [6] PROMOTING INCLUSION IN RECREATION AND LEISURE ACTIVITIES: AN INFORMATION PACKAGE. <https://www.recreationtherapy.com/articles/promoting-inclusion.htm>. Accessed November 21, 2019.
- [7] USPSA. USPSA | Coaching Resources. *USPSA*.
<https://www.powersoccerusa.org/membership/coaches-corner>. Accessed November 20, 2019.



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