CHAMPIONS: THE CORNERSTONE OF PLTL PROGRAMS

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Stories of how Peer-Led Team Learning (PLTL) programs are started have an expected arc. A faculty member or instructor decides to incorporate a peer-led workshop component in their class, where students can discuss and work out problems related to the course. The initial flurry of activities includes finding students willing and able to be workshop leaders, and deciding on materials suitable for workshop sessions. Over the course of a semester, there are constant weekly tasks: meeting with the workshop leaders to ensure that content is covered, perhaps writing workshop materials, perhaps assessing the performance of students with and without workshop sessions. These activities are energizing when the program is new, and manageable when the program is small. Yet once students show improved performance, or peer leaders demonstrate better retention into higher level courses, there is in place a routine and a cycle that repeats itself from semester to semester. With demonstrable improvements, what may have started as a small-scale program takes on a larger context, as unexpected struggles of various kinds may now present themselves. Such struggles may include figuring out new roles for instructing and ways of learning, as well as responding to contextual opportunities and issues. What then? What drives people to keep working with Peer-Led Team Learning? Such people could be called "champions," because no matter what the odds, they keep struggling to ensure the continuity of their campus program, promoting expected and unexpected outcomes. Champions are the cornerstone of PLTL programs, because without champions Peer-Led Team Learning would not continue to work.

What drives people like you, in this audience, to work with very little reward or recognition, and in the face of sometime great resistance? This paper is an initial exploration of champions of PLTL. Presented first are some ideas from open-ended interviews with five faculty practitioners at New York City College of Technology ("City Tech"), City University of New York (CUNY) in the Fall 2014 semester. All five are faculty in STEM fields (two in Chemistry, two in Mathematics, and one in Civil Engineering) and all are women; and second are responses to questions posed to five panelists at the 2015 PLTLIS Conference. The panelists were Jim Becvar (Chemistry, University of Texas at El Paso, Texas); Mitsue Nakamura (Mathematics and Computer Science, University of Houston, Downtown, Texas); Thomas Pitzer (Biology, Florida International University, Florida); Andrew Pye (Biology, University of Exeter, Cornwall, UK); and Melanie Villatoro (Civil Engineering/Construction Management, New York City College of Technology, CUNY).

Recruiting and Working with Peer Leaders: New Roles

City Tech offers both two-year and four-year degrees. Students majoring in Chemistry are in the two-year Chemistry Technology program, and recruiting Peer Leaders has proved difficult. As a solution, a Chemistry professor recruited from experienced Peer Leaders who had first led mathematics workshops and had taken Chemistry courses. This was possible because Applied Mathematics, a Bachelor's program, has a Science track.

Working with Peer Leaders was a new role for a Mathematics professor. Initially she did not work closely with them because she "did not understand that aspect of the PLTL program." After three semesters, she saw how the Peer Leaders grew intellectually and in maturity and realized it was a more comprehensive program: "There's a lot more to this" and started working more closely with Peer Leaders. A second Mathematics professor noted that one of the benefits is that on a weekly basis, Peer Leaders report back, creating a feedback loop and a bond between Peer Leaders and faculty.

Perceived benefits

Performance: As a result of implementing PLTL, a Chemistry professor reported, there were fewer withdrawals, and the percentage of women in the two-year Chemistry Technology program went up. A Civil Engineering professor found that retention improved, and students were more successful in subsequent courses, very good outcomes. So good that as of the fall 2015 semester, all sections of the course have embedded workshops. The professor convinced the department that PLTL was critical to the success of students.

Support structure: For most students, workshop sessions are their first exposure to peer to peer learning. The advantages of peer-led sessions are that it promotes group work that students may not have had in the past: learning as a shared experience. Workshop sessions blend mastery of content and improved learning strategies and study skills with other general competencies, as explained by a Mathematics professor. She also noted that workshop creates a "sense of community" in class, relevant to college life. The effect of bonding continues after workshop, especially when class ends. A Chemistry professor noted that workshop creates another support structure for students who may be uncomfortable talking with faculty. Within a year, a Civil Engineering professor noticed that students became more successful and gained confidence.

Critical thinking: A Mathematics professor stated that having her class of 35-40 students who for one hour struggle with the material is good; she liked that they struggled, so that they must think about the material. A Civil Engineering professor noticed that students were better able to build on prior knowledge to apply what they have learned. A Chemistry professor noted that, "There is a better connection between class and the concepts of what they are doing in the class."

Added value: Two of the five faculty mentioned that leading workshops is an opportunity for students to see if they like teaching. As one noted, "PLTL experience is especially good for students who want to be teachers."

<u>Changes in habits</u>

For students: Students take workshop more seriously if they understand the contribution of workshop to grades.

For Peer Leaders: Peer Leaders can influence students to do something. One Mathematics faculty mentioned that Peer Leaders learning how to grade (the workshop quiz) is a skill that must be taught.

For faculty: There is no need to teach class differently. However, four of the five faculty mentioned that working with PLTL is time-consuming for faculty because Peer Leaders need to understand content and faculty must monitor this. There is extra work! It takes time for preparation, as one person noted, "the materials (worksheets) must match what is taught in class;" and constant communication with Peer Leaders is necessary. Incorporating peer-led workshops is more work, not in teaching, but in planning and preparing, at least initially, and then it becomes a pattern. As one professor noted, "I trust what the leaders are doing in there."

For the Civil Engineering professor, an unexpected outcome was that materials – the weekly worksheets used in workshop - needed revision to make them more challenging for group work.

One person noted that "PLTL is a very worthy [professional development] experience for everybody: faculty, Peer Leader, and students."

<u>Spreading the word among colleagues</u>

And then, what happens? Critical to the success of the PLTL program at City Tech was the consistent support of a champion who was not interviewed, but whose presence showed up in the interviews. Janet Liou-Mark was an early adopter of PLTL in her mathematics courses, and her persuasive influence was noted. One of the Chemistry professors said she found out about PLTL workshops from a student who participated in a mathematics workshop and she subsequently spoke with Janet Liou-Mark and decided to try it. One of the Mathematics professors was asked to teach a course which included an embedded workshop, where the materials had already been written by Janet Liou-Mark.

<u>What defines a Champion?</u>

Andy Pye asked, "Why should faculty be interested?" He acknowledged that, "This is hard work which is not often rewarded. The common story is faculty apply for a grant, get the grant, there's money to spend, everything is new, there is the 'fun bit' to doing it. But then the program develops, and one does it for other reasons, and one sees how well students are doing, one engages with students; one becomes more engaged, there are ever more benefits to them, one sees them growing, it is so rewarding, so that even at the end of the grant, the rewards are still there. Then it is a matter of finding new people to pick up the mantle. In our case, look to people who have been leaders; in our program, we have taken on interns who are most successful at carrying on. Most of the rewards are intrinsic, of seeing students grow."

Mitsue Nakamura pointed out that, "Someone has to believe in it, knows it works, sees how it helps the students… You are fulfilled, working with the students, seeing the students grow… It can't be because of money, or that it looks good on a CV (curriculum vitae), you have to believe in it."

<u>What measures could help a Champion?</u>

Repository of materials: Thomas Pitzer responded that, "One of the best ways of getting faculty buy-in is to provide assistance to professors for every course. By creating a repository of workshops, any subject could come up. If a professor wants to start implementing PLTL workshops, there is not as much investment as a stand-alone faculty who wants to do it. A central office could offer assistance in creating modules. There is the time spent in Group Discussion [weekly preparation sessions], but one to two hours out of a week is not so hard, especially with assistance. Be realistic about how much work is involved, but once started, it is a lot easier."

Overcoming resistance: Andy Pye suggested linking the program to other tasks one is already doing because there are so many tasks to do. He stated, "One of my tasks is overseeing the tutoring program. Some who were doing tutoring now are doing peer leading. Talk to colleagues who are champions of employability, mention the increase in communication skills of the Peer Leaders. Part of my job is linking to other people's roles."

Thomas Pitzer provided an exemplar to answer what can help overcome resistance in departments. "There is a degree of embeddedness of the PLTL program [at FIU], so that should I leave now, I am not afraid that the program will collapse. Ten years ago there was a 'buying in' of more people. All play a role: the larger the role the smaller the program, where there is one champion. I'm lucky, because we have many champions, and can identify the ones who will go on. Someone will say, [I worked for you last year, I worked for him,] I'll give it a shot. You can't force it down people's throat. Be a good example, and offer service to those who want to start PLTL in other courses or departments."

Audience Member comment: "At San Jose City College, there is engagement bringing together faculty and administrators. Faculty involved with PLTL care about its success. To become better champions, take part at the table, be part of the governance of the institution, join one more committee, especially on decisions made in terms of funding, make PLTL a list item, be part of the strategic planning of the institution."

Obtaining [administrative and Administration] support

Recognition of Workload: Jim Becvar responded to a question as to why would faculty care about incorporating PLTL if teaching is rarely rewarded. He explained that workshops in General Chemistry I and II are mandatory at UTEP. Faculty initially gave up some course time to incorporate an "embedded" 2-hour weekly workshop as part of the courses. Those had to be scheduled during the week, as every student had to have a place to go. This scheduling resulted in giving workshop a course number; there are 40 workshops a week, and each has a university designated number. Now those sessions need places to meet, and have to be scheduled, because a student cannot take General Chemistry 1 without a workshop, so some faculty member's name has to be associated with that session. By having a formal mechanism to define teaching load, faculty would have institutional recognition for their efforts.

Two City Tech faculty had suggested that one hour release time would help faculty to work with Peer Leaders, to get credit as part of their workload. Or the weekly meetings, or "Prep," could be considered as "service" for promotion/tenure.

Melanie Villatoro noted that, "It is hard enough to keep track of my own sessions. If there were a coordinator for the department, who could help instructors, that would be beneficial. This would mean a commitment of money and support from the administration. So it is important to have current data, including how PLTL benefits underrepresented minorities, so that the administration knows it is working, because I want my students to do well, but not all faculty has that heart or passion."

What might be administrators' role in fostering champions? Mitsue Nakamura noted that one must get some help from the Administration. "This generation's students are digital natives, while we are digital immigrants. Think of 'native' PLTL, we weren't the original leaders. Who can really promote PLTL? The Peer Leaders…My dean is born to PLTL, I 'got his pocket,' because he has seen the action of my Peer Leaders, he sees what they bring to the college and the university. To convince administrators, send in the Peer Leaders, watch the Peer Leaders in action, they promote the program."

The role of PLTLIS

Audience Question: Wouldn't it easier if there were workbooks that were put together, have the materials available on the website, provide existing worksheets, maybe charge a little bit?

Geoffrey Saupe (University of Texas at El Paso) noted that there is an effort underway to develop workbooks. Getting support to do this is problematic because there is a lot of pressure on administrators by the State of Texas to show that faculty are efficient, that they are doing what they are paid to do, with so many teaching hours. "The effort of developing workbooks for us is working with upper administrators who can go to the State, and show that we are producing tons of teaching load hours, and we can get credit for this. Still, there is paranoia, that we are getting away with something. Yet we actually can show administrators that they are getting what they want, and professors can do less."

Andy Pye stated that having workbooks, and materials on the website would be helpful. "There is also the need to go beyond that, to have available data on withdrawal rates, on participating institutions, samples of financial proposals, ways to pitch the idea to a department…show the whole package, how it works at such and such university, how much it will cost, here are the workbooks, here you go…"

Mitsue Nakamura suggested compiling a database, so that it is easier to write grant proposals. "We have data…how can we convince faculty to do PLTL? Once they get started, they see the goodness of it, they can produce research papers. We are a Texas institution and the state is always looking for evaluation data, in part to answer, how innovative are you in teaching? The current phrase is 'high-impact educational experience' which equals PLTL. Share with faculty who don't know much about it."

Conclusions

A Chemistry professor at City Tech noted that, "If you want to see students gain critical thinking skills, independence, and if you want to retain more students, gain an appreciation of team building skills, get PLTL!" As two panelists mentioned, the intrinsic rewards of seeing students grow generates part of the desire to be a champion of PLTL. Beyond improved performance on tests, faculty observed

that PLTL adds to critical thinking skills, and is important in promoting communication skills, as well as confidence and maturity in students and Peer Leaders.

Finding common cause with other strategic efforts on campus, such as the employability issue, is a way of advertising the benefits of PLTL. Finding new champions by engaging in conversation and informing faculty about what they would have to do is an ongoing effort. It may help, as Mitsue Nakamura noted, that one must "Address the next generation …who will take over from you? One answer is to look at your Peer Leaders. One of my computer science students went on to get a master's degree and came back to teach. It is important to nurture returning (experienced) Peer Leaders, because they may believe in PLTL more than we do. Many of us who initiated PLTL on our campuses were not Peer Leaders. The next champions may be found by you yourselves in nurturing new faculty."

There is another lesson for champions of PLTL. Melanie Villatoro noted that, "This is not the way I learned, so I am learning."