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Creating a Transformational Learning Experience: Immersing Students in an Intensive Interdisciplinary Learning Environment

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Creating a Transformational Learning Experience: Immersing Students in an Intensive Interdisciplinary Learning Environment

Abstract

The Simmons World Challenge is a unique, interdisciplinary program recently developed at Simmons College. It immerses students in an intensive winter-session course that challenges them to tackle a pressing social issue, such as poverty or hunger, and create actionable solutions to the problem. The program was conceived and designed to harness the strengths of pedagogical theories on transformational teaching and learning. This article describes the Simmons World Challenge and presents assessment findings from the program's third iteration in 2013, as well as on the long-term impact of the program based on follow-up assessments with the first two cohorts of students. These assessment findings demonstrate the deep and positive impact of the program on students' engagement with learning, personal growth, academic habits and attitudes, student leadership and initiative, and sense of community at Simmons College.

Keywords

transformational learning, transformational teaching, interdisciplinary programs

Cover Page Footnote

We are grateful to our Simmons College community for creating the space for this innovative teaching and learning experience. We wish to thank President Helen Drinan and Dean Renée White for championing this program, and we are immensely grateful to our fellow faculty and staff for supporting this curriculum. We are indebted to Jennifer Herman and Trisha Elam Walker for their careful review of this manuscript. Finally, we are ever thankful to our students, who ensured that this program exceeded every expectation!

Introduction

Have you ever heard the words, “Will it be on the test?” or “Is this important?” If you have been in the classroom long enough, you have, because our educational system has trained students to think that grades, and not necessarily long-term learning, are important. There are a number of contemporary approaches to teaching and learning that focus on reinvigorating education by concentrating on acquiring knowledge and understanding rather than fixating on grades (Svinivki & McKeachie, 2011; Slavick & Zimbardo 2012). The literatures on transformative, student-centered, active, experiential, cooperative, and self-directed learning all focus on reframing the learning process (Mezirow 1981; Weimer 2013; Kolb 1984; Millis 2010; Cunningham 2012). While philosophical differences exist between these perspectives, they are more similar than divergent. One key similarity to all of these approaches is the role of the instructor. Rather than being a “sage on a stage,” Slavich and Zimbardo (2012), write that “...teachers should act as facilitators who provide students with guided opportunities to interact with each other, rather than as lecturers who simply dictate answers” (p. 575). They embed this idea into their conceptual framework of transformational teaching.

“Transformational teaching involves creating dynamic relationships between teachers, students, and a shared body of knowledge to promote student learning and personal growth. From this perspective, instructors... accomplish these goals by establishing a shared vision for a course, providing modeling and mastery experiences, challenging and encouraging students, personalizing attention and feedback, creating experiential lessons that transcend the boundaries of the classroom and promoting ample opportunities for prefection and reflection” (Slavick & Zimbardo, 2012, p.571).

Building upon the scholarship of teaching and learning, we were curious whether a program built on transformational teaching and learning could 1) improve active student engagement in the learning process, 2) enhance students’ sense of confidence and

initiative in seeking academic and leadership opportunities, and 3) improve students' sense of community and belonging in the university setting. With these questions in mind, Simmons College has embedded transformational teaching principles and methods in the development of what it calls the Simmons World Challenge. The program immerses students in an intensive learning experience in which students take ownership of their learning and develop an interdisciplinary approach to solving problems.

This paper provides a detailed description of the Simmons World Challenge and links it to the literature on transformational teaching and learning. It also presents assessment data focused on the questions highlighted above. The assessment data presents both short- and long-term findings focused on student feedback and self-assessment of their engagement with the course and its impact on their personal and academic growth. The paper concludes with a discussion of ongoing and future areas of development for this program.

Review of the Literature

Multiple strains of academic literature exist on principles and methods to improve student learning. Generally the literatures related to transformational learning hinge on active student engagement in the learning process and on students assuming responsibility for their learning. Transformative learning, self-directed learning, experiential learning, and collaborative learning, each of which aims to enhance students' engagement, are some of the pedagogical approaches that are widely described and evaluated in the literature. In addition to active student engagement, another key feature of transformational learning is transformational teaching. In order for students' role to change, the role and responsibility of faculty must change as well. We present each of these approaches below, and then discuss how they coalesce in the transformational teaching and learning approach.

The concept of transformative learning began with Mezirow in the late 1970s. Mezirow (1978, 1981, 1991) wrote about

transformative learning as a hallmark of adult education with the focus being on the unlearning of biases and faulty perceptions and the replacement of those faulty understandings with a new way of conceiving the world or the self. Mezirow (1991) claims that transformative learning is a different type of learning, a “. . . learning that involves reflectively transforming the beliefs, attitudes, opinions, and emotional reactions that constitute our meaning schemes” (p. 223). In this framework, the transformation can be a shift in knowledge, a shift in attitude, or a shift in perspective. Cranton and Kasl (2012), Taylor (2007), Erickson (2007), and Mezirow (1998) find that people shift habits of the mind through experience and critical reflection. Whether through thought, through writing, through discourse, or through action, transformative learning is dependent on active self-engagement with a topic or an idea. This suggests the use of pedagogical approaches that provide opportunities for students to confront, challenge, and resolve their perceptions.

Beyond its focus on shifts in knowledge, attitude, and perspective, a second aspect of transformative learning revolves around the issue of agency. This suggests that the search for knowledge and understanding must at least in part be self-directed and germinate within the individual seeking the knowledge rather than from an external source. This transforms the locus of learning from faculty to student (Newman 2012). This perspective is consistent with the work of Paulo Freire (1970), who promoted the idea of a pedagogy in which students, rather than being receptacles into which teachers would deposit knowledge, would take ownership of their educational process. This agency perspective is an underlying aspect of the theory of self-directed learning. In a seminal work, Knowles (1980) focuses on the ideas of ‘self-directed learning’ and ‘self-directed inquiry.’ His perspective reinforces having students be the drivers of their own education and of their own learning. Cunningham (2010) has a slightly different take on the idea of self-directed learning. His perspective is more focused on the motivation and self-discipline needed to be a successful learner. Unlike Knowles and Mezirow, he identified an essential role for

faculty in self-directed transformative learning. The role he recognizes is that of facilitating self-directed learning projects.

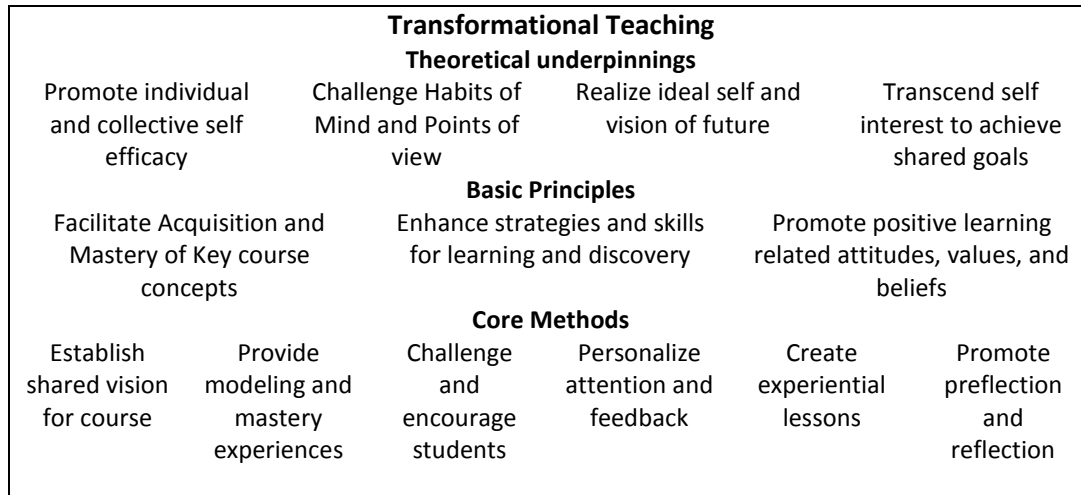
Both transformative learning and self-directed learning depend on active engagement with a topic of interest. This leads to yet another approach to teaching and learning which is captured through experiential learning activities. According to their seminal works, Kolb (1984) writes that true knowledge is created through experience while Dewey (1938) writes that experiential learning transforms impulses and feelings into purposeful action. In describing an experiential learning project he ran, Adeniji-Neill (2012) writes that the project fostered curiosity and facilitated student engagement in the community, while providing students with the opportunity to understand the multi-faceted dimensions of world challenges. Experiential learning can include anything that puts the students into an experience rather than engaging in a topic through books and secondary research. Simulations, field trips, community interviews, expert panels, and service learning are all examples of experiential learning (Svinivki and McKeachie, 2011). One aspect of experiential learning is that it increases engagement with a topic thereby making it more relevant to the learner. Eyler (2009) posits that experiential learning activities which take students into the community enable the students to interact with the community and become more engaged with the world issues.

Beyond encouraging engagement, a key aspect embedded in experiential learning is collaborative and cooperative learning. According to Teasley and Roschelle (1993), collaborative learning involves working in groups so as to share the effort of attaining a shared learning goal. Millis (2002, 2010) finds that cooperative learning strategies that make use of group interactions promote deep learning. Underlying these strategies are a recognition that learning is an active, constructive process; that learning requires a shared sense of community; and that learning requires an inherent respect for students as capable learners (Svinivki and McKeachie, 2011). In some ways, working with others may seem to be diametrically opposed to the ideas of transformative and self-directed learning which are both

centered on the self. But in other ways, working with others is supportive of both deeper learning and more engaged learning. Mills (2002, 2010) would agree that properly structured, experiential learning exercises create an environment to support deep, transformational learning. Eyster (2009) finds that experiential learning encourages the type of reciprocity and cooperation between students which improves learning. The study of collaborative learning has a long and rich tradition, which has led to the publication of a vast number of research studies examining the effects of collaborative learning on a range of desired learning outcomes. For instance, Nichols (1996) found that collaborative learning improves student achievement. Klein and Pridemore (1992) found that it increases time on task, while Jones and Issroff (2005) found that it improves student motivation.

Because of the similarities of the learning approaches outlined above in terms of active student engagement in the learning process, Slavich and Zimbardo (2012) suggest that all of the learning approaches can be viewed "...as complimentary components of a broader approach to classroom instruction called transformational teaching" (p. 569). They argue that the role of the instructor is "...to increase students' mastery of key course concepts while transforming their learning related attitudes, values, beliefs, and skills" (p.576). Underlying this is the idea that learning and teaching, or teaching and learning, are intricately related. While a goal of learning is for the student to grow academically and socially, the goal of teaching is to inspire and guide students (Rosebrough and Leverett 2011). What emerges from this is a new definition of the instructor's role in education and a reworking of how classroom time is structured and used. It requires, "...broadening teaching objectives so that they include enhancing students' attitudes towards learning, and their beliefs regarding their capability to acquire, synthesize, analyze, and use knowledge in a manner that is relevant and meaningful for their lives" (Slavich & Zimbardo, 2012; p. 575).

Slavich and Zimbardo (2012) summarized their model of transformational teaching using the graphic model reprinted below (p. 597).



The four theoretical underpinnings provide the foundation, not only of their work on transformational teaching, but more broadly on the whole arena of transformational learning. The basic principles provide their definition of transformational teaching, while the methods align again with the various literatures on transformational learning. Their core methods were adopted and implemented to provide the teaching and learning foundation for the Simmons World Challenge.

Emanating from a desire to create a student-centered learning environment based on the learning theories outlined above, the faculty and staff at Simmons College designed the World Challenge. Along with designing the course itself, faculty developed detailed surveys to assess whether the curriculum met both the overt learning goals of the course as outlined below, as well as whether the experience had an impact on student engagement and ownership of the learning process. Here, we present our findings related to student engagement and transformation as a result of this student-led, collaborative learning experience.

The World Challenge Program

Overview

Simmons College is a small university in the Boston Area, with an enrollment of approximately 1,800 undergraduate women and 3,000 graduate women and men. It is comprised of 5 schools offering degrees in both liberal arts and professional education. Among other majors, the Liberal Arts and Science offerings includes Biology, Psychology, Economics, History, Art, and Modern Languages. Professional majors include Nursing, Nutrition, Computer Science, Communication, and Management. Approximately 25% of the undergraduate students are adult learners, over the age of 24.

The Simmons World Challenge is a sophomore-year, experiential-based program that emphasizes interdisciplinary team work, critical thinking, problem solving, and community advocacy in order to create a transformational learning experience that supports self-directed learning. Each year the program focuses on a specific world challenge; past challenges have included hunger (2011), poverty (2012), immigration (2013), media representations (2013), and violence (2014). The Simmons World Challenge program provides an opportunity for a student-directed learning experience through which students develop an understanding of a specific world challenge and then acquire the skills necessary to develop actionable solutions that address a particular aspect of that challenge. The course emphasizes both content and process to ensure that the students not only understand the issues, but also develop the project management, team work, and research skills needed to actually address the challenge. Aligned with the Association of American Colleges and Universities' Liberal Education and America's Promise initiative (2011), the learning transcends the specific issue being addressed and allows students to develop a set of skills that may be applied in a number of settings to address a broad spectrum of challenges.

The program was first piloted in 2011 and completed its third iteration in 2013. The curriculum is based loosely on the

National Academy of Engineering's Grand Challenges in Engineering Curriculum. The engineering curriculum focuses on 14 grand challenges in engineering that span the gamut of engineering fields focusing on, for example, access to affordable energy and clean water, improving urban infrastructure, and developing better medicines (National Academy of Engineering 2014).

Instead of focusing on engineering challenges, the Simmons World Challenge focuses on social problems such as immigration, poverty, and hunger. Here, the solutions are built by linking theory from liberal arts and science disciplines to practice. In order to support an interdisciplinary approach, lead and support faculty members are selected from across disciplines at Simmons. Regardless of the specific challenge, the learning goal is for students to develop a broad understanding of the global societal challenge and then to identify a specific aspect of the problem that they are interested in tackling. In interdisciplinary teams, students work together to create a workable solution which addresses the specific aspect of the problem that they identified. The co-curricular goal is for students to drive the learning process with the support of faculty and staff (Simmons College 2012, 2014).

Program Goals

The overall goal of the Simmons World Challenge is to provide a model for an interdisciplinary, interactive teaching and learning experience at Simmons College which challenges students to 1) acquire a working knowledge of the global social problem, including understanding of local and global social, economic, political and cultural dynamics and existing responses, 2) develop the practical organizational, technical, research and communication skills to work effectively and efficiently in teams, and 3) formulate creative and actionable solutions to address the global social problem.

The program has a number of other objectives as well. For students, one objective is to create an intensive, interdisciplinary experience in which students can immerse themselves in ways

not possible during typical semester studies, thus creating a high level of student engagement to promote student-driven inquiry with students assuming ownership of their own learning process. A second objective is geared toward improving student retention. This informed the timing and focus of the world challenge program as a sophomore-level experience. The program is introduced to students during their freshman writing seminar with the hope that it will help reduce attrition between freshman and sophomore year, as this is the timing of most student decisions to transfer or withdraw from college. For faculty, a central objective is to create opportunities for developing cross-disciplinary collaboration and innovative curriculum design.

Program Description

Students apply early in the fall to participate in the program through a competitive process. Up to 33 students are chosen each year. The application process allows the creation of an interdisciplinary group which includes students from many different majors and different schools. Stipends are offered to students to ensure that students of varying socioeconomic backgrounds are not excluded from participation and to off-set earnings student may have foregone by not being able to work over winter break. Students also receive 2 credits for course participation.

Table 1 presents an overview of the program phases and components. The program begins with a series of required workshops during the fall semester that get students to start engaging in understanding the challenge and to help set the stage for a student-directed intersession learning experience. The dates for the fall workshops are published along with the application and attendance is required, although separate credit is not awarded for these workshops. One workshop introduces the faculty members and staff, delves into the role of faculty in a student-directed learning environment, and starts the team work component of the course with an interactive program on forming productive and innovative teams. Another workshop introduces the major topic of the course through interactive activities such

as simulations, breakout groups, and panels. Students continue to engage with the core topic on their own between the end of the fall semester and the start of the January intersession. Students are provided with a reading list and research questions and are asked to write ongoing reflections about what they have read and/or to complete a short original research project (such as a content analysis of media representations). Students return to campus in January for an intensive 10-day to 2-week program (which varies according to the academic calendar and holidays). To create a sense of community, all students reside on campus during the January program. Students who normally reside in the dormitories move back into their regular rooms. Students who usually commute to campus are assigned commuter rooms located in the dorms or are partnered with resident students as roommates.

Table 1: Course Stages and Components

Pre-Program Preparation	Early Program	Mid-Program	Late Program
2 Fall Workshops <ul style="list-style-type: none"> • Teamwork • Introduction to topic Assessment: <ul style="list-style-type: none"> • Self-assessment of teamwork traits • Pre-test on understanding of topic Independent Work <ul style="list-style-type: none"> • Reading list • Written reflections • Preliminary primary research 	Topical emersion <ul style="list-style-type: none"> • Mapping of causes • Solution evaluation • Intervention brainstorming Residential living	Daily team meetings <ul style="list-style-type: none"> • Specific issue identified • Initial presentation • Refining the project Initial proposal presentations <ul style="list-style-type: none"> • 10-15 minute presentation • Faculty and student feedback Assessment <ul style="list-style-type: none"> • Peer and self-evaluations Residential living	Final Presentation <ul style="list-style-type: none"> • 10-15 minute presentation • Faculty and student feedback Examples: <ul style="list-style-type: none"> • Maternal Health Campaign • High school-to-college visitation program for girls Residential living Assessment <ul style="list-style-type: none"> • Peer and self-evaluations of teamwork • Post-test on understanding of topic Final program evaluation survey

Generally, the first two and a half to three days of the winter session program focus on providing opportunities for students to

process the concepts and perspectives presented in the independent reading and research students complete during the semester break. In doing so, students map the underlying causes of the challenge along with the intersections between the targeted challenge and other related societal issues. For example, in the challenge that focused on poverty, students created a map of the causes of poverty which included access to education, adequate nutrition, appropriate health care, and availability of economic opportunity. Further, students decomposed the interaction between poverty and being female. Students also evaluated currently implemented solutions to identify why they either succeed or fail. At the end of this topical immersion, students are assigned to 3-4 member teams based on a previously completed team skills assessment (Nitkin, White & Shapiro, 2014). Teams spend the next day and a half to two days brainstorming possible interventions, deciding on a specific initiative to focus on, and developing an initial proposal for the chosen initiative. The core requirements of the team initiative are that it must address some specific aspect of the social problem, it must have some local element based on the concept of campus to community engagement, and it must demonstrate a potential for high impact. Some of the proposals from the poverty challenge were a maternal health campaign and a high school-to-college visitation program for girls in Boston Public Schools. An overview of all of the poverty initiatives can be found on the Simmons College website (2012).

Once student teams hone in on a specific aspect of the issue and on an actionable initiative, they present their initial proposals to fellow students, faculty, and community partners with expertise in the topic area to get valuable feedback before becoming totally enmeshed in their project. Presentations include an articulation of the specific aspect of the issue they are aiming to address, an identification of their proposed solution (i.e. social media app, documentary, policy advocacy campaign, website, petition, resource guide, social enterprise, etc.), a research plan including unanswered questions, and a work plan that they will follow to complete their work in the allotted time. During the presentation, faculty, community partners and fellow students

take notes and provide written and oral feedback to each team including additional issues that should be considered, resources that are available within and beyond the group, and questions that are unanswered. The remaining days of the program are devoted to self-directed team work. Teams meet daily, often for more than 8 hours per day, to work on developing their initiative or solution. Faculty members are available for daily check-ins, and offer support, feedback and resources as requested by student teams. On the final day of the program, student teams present their initiative along with an implementation plan to fellow students, faculty members, and community partners. During the 2013 program, an additional campus event was held early in the spring semester during which teams presented their final initiatives to a panel of foundation partners wherein teams were provided with real-world feedback regarding the feasibility and “fundability” of their proposal.

Role of the Faculty members

With the goal of creating a transformative, self-directed learning project, the role of faculty members and support staff was carefully considered. One decision was for the Simmons World Challenge to utilize faculty members from many different disciplines in order to examine a world problem from a variety of perspectives. As a result, each year, students have access to an interdisciplinary group of faculty members, which has included professors of Social Work, Sociology, Nursing, Nutrition, Mathematics, Management, Library Science, Lab Science, and Communications. Interested faculty form interdisciplinary teams, sometimes in consultation with the Deans of Simmons’ schools, and submit detailed proposals to a program team situated in the Office of the Dean of Arts and Sciences. In addition to the faculty team, each student group is also paired with a teaching assistant, a librarian, and a writing center staff member for guidance throughout the intersession project period. This group of support staff is available during normal library hours and via email after hours. This combination of faculty members and staff models the interdisciplinary nature of real-world solutions.

The primary role of faculty members and staff is to act as resources and mentors. During the first 2-3 days of the program, the faculty structures interactive large group sessions to provide the foundation for self-directed student learning. Even in this early part of the program faculty members intentionally refrain from direct instruction of course content and instead create experiences and structure activities to facilitate student acquisition of knowledge from primary and secondary sources. Faculty facilitate discussion among the participants so that students may share the knowledge they already have; ask questions that allow the students to discover connections on their own; bring in relevant community speakers; and direct students to useful websites, books, articles or movies. After the first few days, the visibility of faculty decreases to daily check-ins as student teams structure most of their own time. The role of the check-ins with faculty members is to facilitate the creation of a nuanced understanding of the specific problem and to mentor students in task-related skills that allow them to function creatively and effectively in interdisciplinary teams and produce a detailed, actionable intervention. They provide an opportunity for faculty to support student work by pushing students to reach a deeper understanding of the issues, connecting student groups to community resources, keeping teams focused on task, and helping teams move forward if they get stuck on either a process or content issue. Additionally, faculty members also provide support for skills development in areas such as creating an effective team, creative idea generation, team decision-making, development and communication of effective messages, and other important professional skills, such as effective research techniques.

With the goal of promoting student-directed learning it is important for faculty members, staff, and students to understand that it is up to the student teams to decide how and whether to utilize faculty members and/or staff for their specific project. In addition to faculty members, teaching assistants provide added support from a student's perspective. Among other supports, for example, student assistants from the Communications Department provide technical assistance related to their area of

expertise (e.g. video production, website design, etc.). While faculty members and student teaching assistants are not actively engaged in the project work, they are responsible for being available by email, phone or in person during the hours of 9-5 while the program is running, unless otherwise arranged.

Deliverables and Assessment Plan

Overview

Student deliverables for the program include both project and process work. In regards to project work, student groups prepare and deliver a midpoint and a final presentation of their initiative and complete a written implementation plan for launching their initiative. At the midpoint presentation, teams pitch their ideas. They discuss the specific aspect of the world challenge they are hoping to address, identify the population they are targeting, and describe their initiative. The objective of this presentation is to help direct or redirect student groups before they get too embedded in their work. The audience at the presentation is free to ask questions to clarify anything that has been presented and to offer suggestions which will improve the initiative. Between the two presentations, groups work to move their initiative towards completion. The objective of the final presentation is to report on their progress. Depending on the complexity of their initiative, some groups will have completed all of the upfront work and will be ready to launch their initiative while other groups may still be in the planning phase. For example, a group may have written a teaching guide and curriculum for their project while another group may have created a mock-up of a website. The objective of the implementation plan is to explain how the initiative could be rolled out. For example, a number of groups have designed websites as part of their initiative. The implementation plan should articulate how traffic will be driven to the website, so the initiative can be impactful. Rubrics linking the deliverables back to the course goals are used to provide formative and evaluative feedback to students for each of these deliverables.

In regards to process work, there is a mid-point and final feedback process which allows students to reflect on their own and their team mates developing skills. All students complete peer and self-evaluations (detailed in Nitkin, White & Shapiro, 2014). The evaluations go to the faculty members with the peer evaluations also being given to individual team members. Teams also meet to provide face-to-face feedback on team effectiveness at the midpoint and at the end of the project. Additionally, students complete an extensive final course evaluation survey and participate in a focus group which processes their engagement in the learning process.

Method

In addition to assessments of student work and pre/post tests to provide direct evidence of student learning, a comprehensive survey is administered at the end of the program. This survey assesses several topics, including: motivation for applying to the program; evaluation of the course structure, logistics, and content; evaluation of faculty, teaching assistants and other staff; perspectives on and commitment to social justice; pre/post self-assessment of professional skills; and self-assessment of active student engagement, confidence and growth in seeking leadership and academic opportunities, and sense of community and belonging in the university setting. In total, there are 98 close-ended questions, which use a 4-point Likert Scale. Following each question, or topical cluster of questions, there is an open-ended space for adding explanations and further detail. Additionally, there are some targeted open-ended questions. For instance, the survey asks students to describe their most positive and negative experience with the program. The survey is an anonymous, on-line survey that takes approximately 45 minutes to complete. Students are provided time and access to computers on the last day of the January inter-session to complete the survey.

Here, we report all survey results related to active student engagement, personal growth and confidence, and sense of community. This portion of the assessment includes 20 Likert-scale questions (see results tables below), and several open-

ended areas for comment. In addition to surveying current participants, in January of 2013, a long-term follow-up survey was completed by juniors and seniors who had participated in the World Challenge during their sophomore year. An incentive was provided to encourage participation; participants were entered into a raffle to receive a \$50 gift card to the campus bookstore. This survey has several parallel questions to the survey completed by current students, but focuses on the long-term impact of Simmons World Challenge on student engagement. It includes self-assessments of changes in behaviors, skills and attitudes, personal growth, and sense of community. It also includes a few questions asking students to reflect on this program as part of their undergraduate experience. Here, we report on the portions reflecting our research questions, which include 32 questions (see results tables below), as well as areas for open-ended comment.

Participants

Of the 35 student participants in Simmons World Challenge 2013, 29 completed the final course survey, for an 82.8% response rate. While some students chose not to complete the in-depth assessment, nearly all students (except one who was ill) did participate in the focus group debriefing and assessment of the experience. Of the 46 past participants (13 in 2011, 33 in 2012), 32 completed the follow-up survey, for a 69.6% response rate. All students were female (reflecting Simmons' undergraduate student population). 2013 participants had sophomore standing, while past participants were juniors or seniors.

Assessment Results

Student Engagement Results (Short- and Long-Term)

Survey results show that students just completing the Simmons World Challenge felt highly engaged in the learning process. Table 2 shows individual survey items indicating that most or all students agreed or strongly agreed to items indicating a deep sense of engagement in self-directed learning, and a satisfaction with the structures supporting self-directed learning. All the

students reported that they were active participants, that they increased their knowledge and understanding of topics that interested them, and that they enjoyed the intensity of immersing themselves in learning and project development. In another part of the survey, students were asked to report how many hours per day they worked for the course during the intersession. 52% reported that they spent 6-10 hours per day, while 40% reported working 11-15 hours per day. Therefore, that students, at the conclusion of a truly intensive learning experience, responded positively to this item was exciting.

Table 2: Short and Long-Term Assessment Results on Student Engagement

Final Course Survey (2013 cohort)	Agree	Strongly Agree	Total
I would recommend the SWC course to other students.	34.5%	65.5%	100%
I felt like I was an active participant in the learning process.	37.9%	62.1%	100%
I increased my knowledge and understanding of the social issues examined.	34.5%	65.5%	100%
I had an opportunity to explore topics that interest me.	27.5%	72.5%	100%
My learning was facilitated by the organization of the course experience.	44.8%	41.4%	86.2%
I benefitted from participating in the team model.	31.1%	68.9%	100%
I enjoyed the intensity and experience of immersing myself in my learning and in our project development.	37.9%	62.1%	100%
I received the support I needed to be successful in designing an actionable solution.	27.6%	69%	96.6%
Follow-Up Survey (2011/2012 cohorts)	----	----	----
When you consider your time here at Simmons, how important has the SWC been as part of your undergraduate education?	55.6% Important	18.5% Very important	74.1% Total
Have you/would you recommend the program to others?	100% Yes	0% No	

Our long-term survey results also reflect positive memories of engagement. The majority of Simmons World Challenge alumni rate this experience as an important or very important part of their undergraduate education. In commenting on the experience, one student reflected on her engagement, stating, “I learned so much [more] within two weeks than I do in a semester at times – plus, it really opened my eyes to how I can love learning while doing well in a class...” Another student reflected on the importance of collaborative, interdisciplinary engagement, stating, “During this experience I was able to work very closely with my classmates from different majors. I was able to meet women I would not have outside this program who I now see all the time during

school... I was able to focus my time on a project without worrying about working (because of the stipend), or worrying about clubs, or classes, or sports. This was a terrific experience for me overall.” The follow-up survey also posed the open-ended question, “When you talk about or think about your Simmons World Challenge experience, what adjectives or descriptors best capture your thoughts on the program?” The most common responses, shared by at least five students, were “engaging” and “inspiring,” followed by “empowering,” mentioned by four. Other descriptors included: life-changing, educational, interdisciplinary, exciting, challenging, exhausting, illuminating and thrilling.

Personal Growth (Short and Long-Term)

Several survey questions, presented in Table 3, reflect how students have grown personally as a result of this experience. One question, in particular, speaks to this as a transformative learning experience, reflecting how students’ global perspectives shifted: 100% agreed or strongly agreed that “I see the world differently than I did before.” This reflects the shifts in thinking often reflected in transformative learning. Other items represent improved perception of personal strengths and overall positive personal and social changes. Students reflected that they see strengths in themselves that they did not previously see, and that they increased strengths they already had, becoming better versions of themselves. For instance, on reflecting on the “most positive experience” during the course, one student shared, “I have never felt like I could be the leader of a group and this week I fell into that position and excelled at it and it made me feel so much more confident in myself.” All students also agreed or strongly agreed that they relate to other people better and that they have changed in positive ways.

Table 3: Short and Long-Term Assessment Results on Personal Growth

Final Course Survey (2013 cohort)	Agree	Strongly Agree	Total
I see strengths in myself that I did not previously know I had.	28.6%	71.4%	100%
I have increased strengths I already had.	21.4%	78.6%	100%
I relate to people better than before.	50.0%	50.0%	100%

I see the world differently than I did before.	32.2%	60.7%	92.9%
I have changed in positive ways.	28.6%	67.9%	96.5%
Follow-Up Survey (2011/2012 cohorts)	----	----	----
The SWC experience has shaped my approach to friendship.	40.0%	24.0%	64.0%
The SWC experience has given me knowledge or skills that I used to solve a problem in my personal life.	48.0%	32.0%	80.0%

Although not as dramatic as 100% agreement, 80% of long-term survey respondents reflected that the Simmons World Challenge experience gave them skills and knowledge that they use to solve problems in their personal lives and 64% reported that the experience has shaped their approach to friendship. Here, again, the importance of exposure across the disciplines seemed important, as one student shared, "I created great friendships with friends from different majors and have made networks and connections across academic disciplines."

Academic impact (Long-Term)

Our follow-up survey asked students to reflect back on how this experience shaped a number of experiences and choices for them. Table 4 shows that the Simmons World Challenge experience contributed to some students' decisions and approaches related to their major, minor, and course selection. Of particular note is that nearly 40% of students changed their study habits and two-thirds reflected a shift in how they participate in class as a result of this experience. These results link directly back to the research on how transformative, self-directed and experiential learning lead to better student engagement. The overall impact of this program is reflected in the findings that more than half of participants shaped their post-graduation goals based on this experience, and nearly 85% felt that this experience put their college education into a different perspective.

Table 4: Long-Term Assessment Results on Academic Impact

Follow-Up Survey (2011/2012 cohorts)	Agree	Strongly Agree	Total
<i>The Simmons World Challenge experience has:</i>	----	----	----

shaped my course selection.	26.9%	23.1%	50.0%
shaped the direction of my studies in my major.	38.5%	7.7%	46.2%
led me to change my major completely.	3.8%	3.8%	7.6%
led me to add a minor.	26.9%	7.7%	34.6%
led me to take Service Learning courses.			
shaped my attitude toward the Independent Learning requirement I must fulfill as a senior.			
led me to alter my study habits.	30.8%	7.7%	38.5%
shaped the way I participate in class.	57.7%	11.5%	67.2%
shaped my goals for myself after I graduate.	26.9%	30.8%	57.7%
Put my college education into a different perspective for me.	53.8%	30.8%	84.6%

Student leadership and initiative impact (Long-Term)

Table 5 presents several survey items from our follow-up survey, which shows that a majority of students attribute new ventures into leadership along with a new inclination to explore the surrounding city to this program. A number of survey questions indicate that many students either took new initiative, or plan to take new steps, as a result of this program. These steps range from seeking internships to applying for funding and study abroad opportunities. Many of the inherent skills associated with such initiatives are highly transferable to the professional world, and to furthering one's understanding of and ability to propose solutions to future social challenges. These results again reflect the power of engaged learning to transform the individual. More than 60% of respondents changed their behavior in regards to seeking leadership opportunities and engaging in community service.

Table 5: Long-Term Assessment Results on Student Leadership & Initiative

Follow-Up Survey (2011/2012 cohorts)	Agree	Strongly Agree	Total
<i>The Simmons World Challenge experience has:</i>	----	----	----
led me to seek out positions of leadership on campus.	30.8%	30.8%	61.6%
led me to venture more into Boston.	34.6%	23.1%	57.7%
<i>As a result of my participation in Simmons World Challenge:</i>	----	----	----
I became (or plan to become) newly involved	42.3%	7.7%	50.0%

with a club or organization at Simmons.			
I engaged (or plan to engage) in new community service activities.	44.0%	24.0%	68.0%
I applied (or plan to apply) to participate in study abroad.	11.5%	19.2%	30.7%
I pursued (or plan to pursue) an internship.	42.3%	23.1%	65.4%
I pursued (or plan to pursue) new research opportunities, such as a senior capstone.	30.8%	15.4%	46.2%
I pursued (or plan to pursue) new funding opportunities, such as undergraduate travel and research funds.	32.0%	12.0%	44.0%

Sense of community (Short and Long-Term)

Learning theory posits that transformational learning practices impacts the acquisition and retention of knowledge along with the student's sense of ownership of the learning process, helping to create lifelong learners. Beyond its impact on student academic engagement, we were interested in investigating whether the Simmons World Challenge curriculum would have a spillover effect on their sense of community which is tightly linked to student retention. Retention of students is a challenge for many higher education institutions. To investigate this, we asked current and past participants about their sense of integration at Simmons, and their feelings of connectedness to others on campus. We also asked past participants about this program's impact on their feelings towards the college and fellow students, a key factor in student retention. The results demonstrate substantial impacts in this area. Nearly all current participants, and more than 85% of past participants, felt more integrated in their community. More than 80% of current and past participants felt a greater connection to fellow students and faculty, and a healthy majority also felt closer to administrators and staff. In the long term perspective, the large majority of students, 80.8%, felt a strong sense of community because of this program and 88% changed the way they looked at their student colleagues. Further, 73% reported that it shaped the way they describe Simmons to others. One student described how this program increased her sense of place at Simmons, stating, "I was able to find space from my hometown and I was able to be away from home, which is 40 minutes away, without

having my parents visit. It seems like a transition you would learn just living in the dorms, but having my parents so close it was easy to go home every weekend. This course taught me that I could stay at Simmons and make this community my new home, which was a good transition for living in Boston or New York once I graduate school." The transition from sophomore to junior year is an important time in terms of transferring institutions. Over 40% of students were influenced by this program in their decision to return to Simmons junior year.

Table 5: Short and Long-Term Assessment Results on Sense of Community

	Final Course Survey (2013 cohort)			Follow-Up Survey (2011/2012 cohorts)		
	Agree	Strongly Agree	Total	Agree	Strongly Agree	Total
<i>As a result of my participation in the Simmons World Challenge:</i>	----	----	----	----	----	----
I felt/feel more integrated as a member of the Simmons community.	39.1%	53.6%	92.7%	61.5%	23.1%	85.6%
I felt/feel a stronger connection to my fellow students at Simmons.	32.1%	67.9%	100%	38.5%	42.3%	80.8%
I felt/feel a stronger connection to at least one faculty member at Simmons.	25.0%	60.7%	85.7%	42.3%	38.5%	80.0%
I felt/feel a stronger connection to the staff and administrators at Simmons.	32.2%	50.0%	82.2%	50.0%	19.2%	69.2%
<i>The Simmons World Challenge experience has:</i>	----	----	----	----	----	----
changed the way I look at my fellow Simmons students.	----	----	----	56.0%	32.0%	88.0%
instilled a strong sense of community.	----	----	----	57.7%	23.1%	80.8%
shaped how I describe my Simmons education to people back home.	----	----	----	53.8%	19.2%	73.0%
played a role in my decision to return here for my junior year.	----	----	----	26.9%	15.4%	42.3%

Avenues for Future Program Development

Overall, the very strong program assessment results show the value of embracing transformational teaching and learning experiences in improving student engagement and interest in learning. Beyond engagement in the immediate learning experience, this program also seemed to engage our students in a broader sense – they expressed new confidence in themselves and a greater likelihood to seek leadership and other opportunities; they thought about, and engaged differently in, their studies; and they felt more a part of their university community. Many student comments reinforce the multi-faceted benefits they experienced and their gratitude for having participated. As one alumna of the program expressed, “Overall, I became a better student, a much more active Simmons community member, and more thoughtful thinker on social justice issues... Thank you for providing me with this experience.” Her comments were echoed by many.

The findings presented here raise a number of questions that we hope to explore further through the scholarship of teaching and learning. While the World Challenge program provides an experience that is broadly based on transformational teaching and learning, we have yet to discern precisely which aspects of this experience are most pivotal. Our survey instrument did not determine the relative importance of different factors – for instance, the residential experience or winter-session timing of the course, the mentoring approach or interdisciplinary mix of the faculty, the dedicated support of staff and teaching assistants, or the expectation and freedom of self-structured time – in shaping students’ active engagement in this learning experience, and their broader sense of engagement in the university setting. Further investigation could help discern the key factors behind the success of this program.

We also recognize that there are program elements needing improvement, some of which are hampered by logistical limitations. As Simmons’ academic calendar has changed year to year, the January intersession has sometimes shifted from allowing 14 days to 9-10 days for the intensive programming.

This strains an already intensive program. Some students have commented on their desire to have more time to delve into the complexity and nuance of the social problem, as well as to formulate their actionable solution. Perhaps the suggestion that is most often mentioned, however, reflects that students crave opportunities and support to carry their final proposal forward and implement their actionable solution. As one past student shared, "I absolutely loved the program but wished it was longer. I felt like after the 2 weeks, nothing happened with the project. I know it is up to the students to decide whether or not they want to continue with the project but it becomes very hard when we start a semester and become bogged down with other school work. [My group members and I] are still as passionate about our project but haven't had the time to implement it. If there was a supplemental portion to the World Challenge where we could continue it throughout the semester, it would be great!"

The program is working to create opportunities for ongoing student engagement and project implementation. For instance Simmons College joined the Clinton Global Initiative University in 2013 and invited World Challenge teams to apply. The Clinton Global Initiative University engages young adults in an annual spring conference to "discuss and develop innovative solutions to pressing global challenges," which is meant to recognize and support on-going action toward social change through creating a network of resources and opportunities. A number of groups applied and one World Challenge group attended the Clinton Global Initiative University conference in April 2013. Students are also routinely offered opportunities to complete independent study courses in the spring semester following Simmons World Challenge. However, as student schedules are generally set prior to the Simmons World Challenge experience, this has not translated into a feasible option, particularly for students to continue their work in teams. In the future, the program may consider offering a Simmons World Challenge "Part II" experience that provides students a course structure for implementing their proposals during the summer following their Simmons World Challenge experience. The creation of this and

other follow-up opportunities is a priority for future program development.

The Simmons World Challenge continues to evolve as an important initiative in teaching and learning at Simmons College, one which reinforces Simmons' strategic vision of supporting student-centered learning, transformational experiences, deep engagement, and lifelong purpose. Fortunately, the College's President and administration have given priority to this program and provided the significant financial and other supports necessary to ensure its continuation. The program offers an unusual structure that supports intensive, interdisciplinary, student-led learning over the winter session, whereby interdisciplinary faculty member teams serve as resources rather than leaders in the learning process and students are charged with designing much of the process and the entire product of their own learning. Thus, we offer this as one innovative model for addressing the challenge we are increasingly faced with as educators within liberal arts institutions, with which we began this paper – to impart the structure and opportunities whereby students will learn how to truly learn, how to understand today's and tomorrow's challenges, and how to work together productively and proactively to create innovative solutions to pressing societal problems. The Simmons World Challenge offers an innovative and effective approach to merging and embracing the power of transformative, self-directed, experiential and collaborative learning.

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