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An Exploratory Investigation of a Flipped Classroom Model in Human Services Education

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An Exploratory Investigation of a Flipped Classroom Model in Human Services Education

Cover Page Footnote
Authors would like to acknowledge Dr. Miranda Parries for her involvement.
Abstract

Human services education has unique needs due to the practical elements that are a part of preparing students for the field. One aspect is for students to graduate with a firm capacity to enact the skill detailed by the National Organization of Human Services (NOHS, n.d.). A blending of on-campus and on-line components has been found to encourage higher order thinking and offer experiential learning (Rehfuss, Kirk-Jenkins, & Milliken, 2015). The flipped classroom pedagogical model offers one potential way for educators to create an environment that facilitates the learning needed and recommended. This study altered a class to the flipped classroom model, and then used two types of data collection, a survey given twice during a semester and reflections written as a part of the class’ expectation. This was done to explore human services undergraduates’ reactions to the pedagogical model. Implications and lines of further enquiry are included.

*Keywords: impact of technology, resistance to technology, digital inclusion and exclusion*
An Exploratory Investigation of a Flipped Classroom Model in Human Services Education

A flipped classroom style was implemented at a southeastern public university within an undergraduate human services elective course. This course is designated for those students majoring in human services and specializing in youth. The course utilizes a textbook focused on at-risk youth, specifically developed for counselors, teachers, psychologists and human services professionals. This particular human services class was chosen to pilot the flipped classroom style primarily because this model of teaching was described as a possible educational intervention in the primary textbook assigned to the course (McWhirter, McWhirter, McWhirter, & McWhirter, 2017). The intent of this study was to have the students not just read about this possible intervention, but to experience the intervention for themselves, as modeling is an important aspect of human services education (Winfield, Sparkman-Key, & Vadja, 2017). The alteration of the classroom allowed students to engage with the flipped classroom intervention mentioned in the text, as well as facilitated the classroom time needed to test out other interventions discussed in the textbook. The experiential environment inherent in the flipped classroom style held the potential to create multiple opportunities for modeling, while also meeting students’ professional identity development needs.

Creating environments to excellently prepare students for the field include consideration of professional identity development both from a theoretical perspective as well as a practical one. Given that many theorists believe college plays a major role in the development of new professionals (Barbarà-i-Molinero, Cascón-Pereira, & Hernández-Lara, 2017), the question for educators is how to best aid in this process. Completing this task involves giving attention to content, pedagogies, and ideal mediums for teaching. Additionally, the ideal environment would encourage higher order thinking and would contain experiential learning (Rehfuss, Kirk-Jenkins,
A blend of in-person teaching methods with online elements offers one manner to facilitate the growth and the development of students including self-awareness, considerations about the future, and professional identity formation. One pedagogical model that appears to fit the criteria detailed by Rehfuss et al. (2015) is the flipped classroom. In fact, Green and Schlairet (2016) concluded that the flipped classroom is a “heutagогical model that may facilitate the critical thinking necessary for professional practice“ (p. 126).

The Flipped Classroom

The flipped classroom is a pedagogical style first introduced into high schools, and then utilized in college and universities. There are multiple manners of how to implement a flipped classroom (e.g. Betihavas, Bridgman, Kornhaber, & Cross, 2015; Blair, Maharaj, & Primus, 2016; Gilboy, Heinerichs, & Pazzaglia, 2015; Green & Schlairet, 2016; Kim, Kim, Khera, & Getman, 2014; McNally et al., 2017; Njie-Carr et al., 2017; Prashar, 2015; Roach, 2014; Zainuddin & Halili, 2016). Despite the variety of possibilities, the common held attributes are that the elements traditionally conducted during class time (i.e., lectures and class content) are instead completed by students outside of class time. This movement of content is intended to leave class time for projects, group work, and other activities, thereby allowing students to more directly engage with the material. The variety found in how the concept of flipped classroom is implemented is often a reflection of how much of the classroom material is virtual and what digital methods are employed.

Examples of a flipped classroom model in university settings are numerous. One, Blair et al. (2016) reported that the flipped classroom model was implemented by uploading screencasts covering the course content that students reviewed prior to attending class. Then, the first 15 minutes of class were spent clarifying any concepts the students had struggled with. The
remaining class time was spent on group work activities. No additional assignments were given to the students to perform outside of class except for the formally assessed coursework project. In another example, Gilboy et al. (2015) reported that faculty had students engage with weekly out-of-class videos and pre-class modules. Weekly online quizzes taken after students completed the modules assessed students' knowledge of the material. No other changes to the class format were declared. They argued for minimal alterations from the standard classroom style to the flipped classroom model as doing so “will allow students to become familiar with the active learning strategy and avoid the risk of students focusing on the process of the strategy rather than the learning related to content” (Gilboy et al., 2015, p 112). In a third example, Green and Schlairet (2016) reported that students were expected to engage with narrated lectures and pre-readings prior to class at a time and place of their choosing. Peer support was encouraged for clarification of concepts found in the pre-class time activities. Added to this, the classroom was modified to accommodate small group seating (four members) around table. Furthermore, students were offered portable devices along with Wi-Fi capacity to enable access to digital learning materials during class time. Students applied knowledge through peer instruction, small group work, short class discussion, problem solving scenarios, case studies, simulation, readiness quizzes, and small group presentation. At the same time, “faculty circulated among student groups to listen to discussion in order to deconstruct student thinking and assess weaknesses and foster strengths” (Green & Schlairet, 2016, p. 124).

Outcomes of the flipped classroom model have also been compared to traditional teaching models (Foldnes, 2016; Gillispie, 2016; Kurt, 2017; Peterson, 2016; Thai, De Wever, & Valcke, 2017). Foldnes (2016) found in a randomized control study that when the course was flipped and class time was spent primarily working in groups that students significantly
outperformed on the final examination. Peterson (2016) in a quasi-experimental design found that the flipped classroom students outperformed their peers in a traditional lecture class by more than one letter grade. Prashar (2015) also found that the flipped classroom model enhanced performance. Sheppard, Vitalone-Raccaro, Kaari, and Ajumobi (2017) found that “students were more engaged with the content” as a result of the class being flipped (p. 6). Based on tests designed to measure learning performance, which were based on Bloom’s Taxonomy to distinguish mastery at different levels, Thai et al. (2017) reported that learning performance was superior in the flipped classroom compared to another blended learning classroom model, a traditional learning classroom, and an E-Learning classroom. Zainuddin and Halili (2016) in their content analysis of flipped classroom studies from 2013-2015 across multiple fields concluded that the flipped classroom model “benefited students academically and motivationally” (p. 332). Gillispie (2016) found that students in the flipped classroom had statistically significant increases of two out of four test scores in comparison to their peers who had been taught in a traditional classroom, one test that was neutral and one that the traditionally taught students performed statistically better than their flipped classroom peers. However, in other studies no significant improvement was found (e.g., Blair et al., 2015).

The Flipped Classroom and Human Services

Despite the many examples of the benefits of the flipped classroom model in other fields, there is a gap in the literature that addresses how a flipped classroom model might fit within human services pedagogical requisites. Potentially the flipped classroom model meets the needs detailed previously by having students primary exposure to the academic material be outside of the classroom, thereby allowing class time to be used for experimental opportunities along with engagements in discussions that are intended to reflect on the application of content.
Additionally, according to Prashar (2015) along with Zainuddin and Halili (2016), the flipped classroom model, using interactive technologies prior to the class meeting, shifts the lower levels of Bloom’s taxonomy to outside the class, which then enables instructors to spend more class time at the upper end of the taxonomy with tasks that stimulate students to apply, analyze, evaluate, and create. In fact, Gilboy et al. (2015) were able to demonstrate how the flipped classroom succeeded in reaching all levels of Bloom’s Taxonomy. There are additional advantages. One offered by Gillispie (2016) was, “From a generational perspective, the flipped classroom incorporates the traditional teaching that Traditionalists and Baby Boomers are accustomed to, while creating interaction and using technology that Generation X and Generation Y need” (p. 36). Although these technological and pedagogical advantages and disadvantages of the flipped classroom model have been investigated in other fields, thus far none exist in human services. Therefore, these findings offer human services educators some considerations on whether or not the flipped classroom format might assist in meeting the needs of undergraduate human services students.

This study utilized exploratory methods to examine what, if any, of the previously mentioned potential outcomes were experienced by undergraduate human services students in a southeastern public university. Two distinct methods were used to capture students’ perspectives on being a member of a redesigned human services course that employed the flipped classroom model. One measurement was a self-evaluation survey. The survey was given to students twice during the semester: once at midterm (week six of a 15 week semester) and then again near the end of the semester. The second form of evaluation was a qualitative analysis of reflections that the students had written. Two reflections from each student were chosen for the purposes of the study: one reflecting on the first class session and one reflecting on the last class session. The
information from these two sources was examined separately. After each analysis was complete, the findings were examined to determine if the two sources were complimentary or contradictory.

**Methodology**

Two different sources of data were collected. One was an electronically administered survey completed by participants at two separate intervals. It examined if students’ self-reports described a perceived increase in their foundational human services skills between mid-semester and the end of the semester. The other data source were reflective essays that were a part of the class’ expectations. For both data sources the participants were the same: the students enrolled in the flipped classroom.

**Participants**

The following demographic information came from the participants when they completed the survey. The information was collected in this way in order to facilitate description of the participant sample. They were asked to indicate their (a) age range, (b) race, (c) gender, (d) major and (e) class standing. A total of 22 (n=22) participants started the survey. For the demographic information reported three chose to opt-out. This left the final number of students at 19 (n=19). According to data from the survey, the majority of students (59%) placed themselves in the age range of 21-22 (n=13) with 14% (n=3) in the 18-20 range, 9% (n=2) in the 23-25 range, 0% (n=0) in the 26-28 range, and 5% (n=1) placing themselves in the older than 28 range. In terms of race, 5% (n=1) of participants identified as “First Nations/Tribal Native American,” 32% (n=7) as “African/Black,” 41% (n=9) as “European/White,” and 9% (n=2) as “Multiracial”. A total of 86% (n=16) of participants identified as female and 14% (n=3) individuals identified as male. No other gender identity was selected. Most of the participants,
80% (n=17) indicated that their major was human services with the others indicating psychology 5% (n=1) and communications 5% (n=1). Most students, 59% (n=13) stated they were seniors, and the rest reported that they were juniors, 27% (n=6). This sample is representative of the demographics of students enrolled in human services courses at the university under investigation. However, it does not represent the demographics of undergraduate student body enrolled at the university as a whole.

**Process of Implementation**

Three months prior to the start of the study the instructor attended a university-sponsored on-campus training on best practices of instruction, which included how to implement the flipped classroom model. The workshop stressed that for a flipped classroom implementation to work, especially for students unfamiliar with the model, as many possible leverages would be needed to encourage students to engage with the materials prior to class and to reflect on activities covered during class. After workshop attendance, the instructor gained department approval to enact the flipped classroom model in the human services elective course. The details of the implementation used drew upon on Kim et al.’s (2014) design principles, which were based on a mixed methods study across three flipped classrooms.

Traditionally the class had been structured to have three exams (worth 60% of total grade), quizzes (worth 5%), two reflections of journal articles (worth 10%), group presentation and paper (combined worth 20%), and 5% of the total grade related to class participation and attendance. Lessons from the workshop along with Kim et al. (2014) were balanced with the need to keep as close to the previous class structure as possible, which was Gilboy et al.’s (2015) recommendation and ensured that the alterations remained in line with accreditation expectations. These factors influenced how the grading materials were altered. The grading
structure was altered to: 18 quizzes, with the lowest three grades dropped, (worth 15%), which were given every day based on context readings that had been assigned, in line with the alterations put in place by Harmon and Hills (2015), along with 28 reflections (worth 28%), which were required to be turned in 48 hours after the end of each class on the topic and/or activities covered that day. Additionally, there was a group presentation and paper (worth 38%), with clear instructions that presentations were to be activities based on the flipped classroom model, an annotated bibliography (worth 5%), which was added to increase students’ familiarity with the library, summarizing, researching a topic, and to prepare them for the group paper, and class participation and attendance (worth 14%). Having students present on course material fit both the suggestion of keeping the course similar to how it was before being flipped and how Sheppard et al. (2017) altered their classroom. These alterations resulted in 57% of the total grade being modified to specifically encourage students to fully engage in the flipped classroom model, while only one new type of assessment was added (i.e., the annotated bibliography).

In a similar manner to Roach (2014), the course’s alteration to a flipped classroom was not advertised, thus did not intentionally enticing students who would be attracted to the model. Nevertheless, to prepare students for the course structure, the text related to the flipped classroom model was assigned a few days prior to the first class. Additionally, during the first class meeting students were informed that the course would be implementing the flipped classroom model. Questions were answered regarding the model, how it would be applied, and the reason why the class was being flipped. This is in line with Gilboy et al.’s (2015) recommendation: “it is important to obtain buy-in from students the first day of class. Specifically, students need to understand the what, why, and how as they pertain to the flipped classroom“ (p. 112). One student withdrew from the class in the first week, although did not
give a reason for doing so. One student joined the class after the first day and was given the reading on flipped classroom, but no additional information was given. No additional changes on the roster were made throughout the semester. Thus, the class began with 22 students and ended the semester with 22 students.

Class meetings were 75 minutes in length twice a week for 14 weeks (the last week of the semester was reserved by the host institution for finals). Prior to each upcoming class meeting instructional materials were available to students virtually. Similar to the flipped classroom reported by Roach (2014), a variety of materials were used. Preparations included tasks like readings from the text, articles, videos from YouTube, powerpoint presentations, or reports on issues found on government or academic websites. The students accessed these materials via an online classroom platform. On the day of class students would practice a short (five minutes or less) intervention first. These ranged from an intervention intended to aid elementary school aged children letting go of their anger to mindfulness activities. Afterwards the students asked questions and engaged in conversations about the materials that they read or watched in preparation for class, as similarly done by Blair et al. (2016). Once confusion appeared to no longer remain, students took a five-question quiz (short-answer or multiple choice). Once the quizzes were completed, they were retrieved and then promptly randomly handed out, so that students graded another classmate’s quiz, and answers reviewed. This process often led to additional conversations about the material. After the quizzes were collected, the next activity would begin. These ranged from a large group discussion, small group discussions, practicing an intervention, a card game designed by the instructor, or a debate. This was similar to how Green and Schlairet (2016) designed their flipped classroom, including the instructor circulating among students. It also was supported by Foldnes’ (2016) findings that student performance increased
when the majority of class time was spent in group work. One of the graded assignments titled Classroom Engagement involved students working in groups to educate their peers about a particular at-risk youth population. Students were placed in groups and then chose the population they wished to focus on. Prior to their date to present, the instructor met with the students to discuss the preparation material related to the population that would be given by the instructor, the content that would be expected to be shared, and the type of activity that the students were considering using. The teacher gave final approval on all planned activities prior to the presentation date. When students presented, they used many of the engagements that had already been modeled, while a few new methods of creative learning were introduced, including a virtual Family Feud, virtual multiple choice answer game played on the students’ phones, and virtual Jeopardy. During these class meetings, all other aspects of how the class time had been managed were adhered to.

In order to prevent possible confusion related to unusually complex topics, there were two classes in which the instructor did not adhere to the before mentioned schedule. Both topics had an in-class lecture in addition to the class preparation material. The topics covered in this way were ethical and legal issues related to working with children, and self harm. In these instances, the students’ reviewed the material in preparation for class as normal, a supplemental lecture was given, additional student questions were answered, and then class ended with taking the quiz for the day.

Measures

Through the progression of the course two measure types, surveys and reflections, were used to evaluate students’ experiences and self-reported foundational human services skill development. The survey was given twice during the semester, the first instance (T1) was
around mid-term (sixth week), and the second (T2) near the 12th week. All students in the class ended the first survey or chose to opt-out within three days, while for the second survey it took 14 days. This difference is assumed to be a result of the end of the spring semester where many of the students expressed feeling overburdened. In the first iteration one student chose to opt-out. This left a remaining 21 ($n=21$) participants. When it was completed for the second time three students chose to opt-out leaving 19 participants ($n=19$).

The primary purpose of the survey was to capture if students described a perceived increase in their foundational human services skills. As such, the majority of the questions, 6-12, related to the general human services competencies (NOHS, n.d.). In addition, to the starting five demographic questions, three, 13-15, related to the students’ opinion of their engagement with the flipped classroom model, and one question, number 16, was on the importance in learning these skills (see Table 1). Next was a question about previous flipped classroom experiences, and if so, which courses. Lastly, there were two open-ended questions: (1) “In regards to HMSV, please describe your experience with the flipped classroom format,” and (2) “In your opinion, how does taking HMSV 448 in the flipped classroom fit in with your needs as a student?” Twelve of the 20 questions contained a likert-scale of seven possibilities. Specifically, questions 6-11 included: extremely adequate, moderately adequate, slightly adequate, neither adequate or inadequate, slightly inadequate, moderately inadequate, and extremely inadequate. Questions 12-16 included: strongly agree, moderately agree, somewhat agree, neither agree or disagree, somewhat disagree, moderately disagree, and strongly disagree.
<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
<th>Competency</th>
<th>Engagement</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>I have had adequate opportunities to practice active listening skills</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I have had adequate opportunities to practice verbal summarizing skills</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I have had adequate opportunity to practice self-awareness</td>
<td></td>
<td>X</td>
<td></td>
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<tr>
<td>9</td>
<td>I have had adequate opportunity to practice critical thinking skills</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I have had adequate opportunity to practice decision making skills</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I have had adequate opportunity to practice social perceptiveness</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>My empathetic understanding of at-risk youth has improved</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I have been engaged with the class material as a result of being present in class</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>I share more of my thoughts and/or past experiences than I do in other classes</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I have gained a deeper understanding of the class material as a result of being present in class</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Practicing skills that I will use in the field is important to me</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
The second source of data was two reflection entries from each student, which were also a part of the class’ assignments. Out of 28 possible reflections, the first reflection and the last reflection were examined. These two were chosen as they had the highest likelihood of containing material specifically about the flipped classroom model. The first reflection instructions stated,

Provide an in-depth one page double-spaced in APA style reflective well-written articulation based on the material from the prior class in response to one of the four options:

1. What created a strong emotional response for you either during class or during the reading? Describe your response. How did you react to this emotional response? How might your response impact working with the population related to your response?

2. What created a curiosity or prevalent thought for you either during class or during the reading? Describe the thoughts that came up for you. What were your reactions to the thoughts triggered? How might your thoughts impact working with the population related to the catalyst?

3. If either during class or during the reading you were reminded of a personal experience related to the material, what generated the memory? Describe what memory it provoked. How did you respond to having something personal described or spoken about in an academic setting (emotions and/or thoughts)? How might your personal experience impact working with the population described?

4. What were some reactions you experienced to the material explored? Imagine working with this population. Describe some advantages and some challenges you
foresee. What opinions prior to this class might strengthen you or make you hesitant in working with this population?

The last reflection instructions stated,

1. Describe your assumptions you had about this class and what you expected. How has the class met or not met your expectations?

2. As you reflect, clearly articulate what is your first response (remember that it can be emotional or cognitive) and describe what aspects of your inner world tied to your response (try to describe all the strings that connect, as if the response was the center of a spider web)

3. Notice and clearly articulate your reaction (what happened second as you reflected). Whatever your reaction (emotional or cognitive) describe it and all aspects of your inner world tied to it. Include how the material did or not did not alter your before mentioned assumptions.

4. Consider how your assumptions that you discovered through this class might have impacted your ability to do your job, empathetically connect with your presumed future client, and the choices you make in how your work with clients, choose interventions for clients, or advocate for clients. How has this class changed those expectations and how do you expect to face what your future holds?

**Survey Results**

In order to capture a picture of students’ overall belief in their opportunities to practice fundamental human services skills, the means for Questions 6-11 were combined into one variable (CP). Using the same method, in order to discover students’ overall sense of classroom engagement (CE) questions 13-15 were also grouped together. For T1 CP mean was $M=2.37$
In comparison for T2 CP was $M=1.47$ ($SD=0.49$). Results at T1 were 28.6% ($n=6$) for extremely adequate, 28.6% ($n=6$) for moderately adequate, 19.0% ($n=4$) for slightly adequate, 4.8% ($n=1$) for neither adequate nor inadequate, 9.5% ($n=2$) for slightly inadequate, 4.8% ($n=1$) for moderately inadequate, and 4.8% ($n=1$) for extremely inadequate. At T2 they were 52.6% ($n=16$) for extremely adequate, 21.1% ($n=4$) for moderately adequate, 26.3% ($n=5$) for slightly adequate, and no responses for neither adequate nor inadequate, slightly inadequate, moderately inadequate, as well as extremely inadequate. Changes for T1 to T2 were as follows: extremely adequate increased from $n=4$ (19.0%) to $n=11$ (57.9%), moderately adequate decreased from $n=9$ (42.9%) to $n=6$ (31.6%), slightly adequate decreased from $n=4$ (19.0%) to $n=1$ (10.5%), neither adequate or inadequate decreased from $n=1$ (4.8%) to $n=0$ (0%), slightly inadequate decreased from $n=3$ (14.3%) to $n=0$ (0%), and no differences occurred with moderately inadequate or extremely inadequate, as both had zero respondents at T1 and T2 (see Table 2).

For question 12 “My empathic understanding of at-risk youth has improved” at T1 54.5% ($n=12$) stated that they strongly agreed, whereas in T2 72.7% ($n=16$) strongly agreed. The largest visible difference between T1 and T2 was that in T1 the remaining answers were spread throughout all the other options. In comparison, in T2 the remaining 13.6% ($n=3$) reported that they agreed with the statement (see Table 2).

In regards to the CE means, T1 was $M=2.49$ ($SD=1.52$), whereas T2 was $M=1.95$ ($SD=0.92$). At T1 the results were 31.8% ($n=7$) for strongly agree, 27.3% ($n=6$) for agree, 13.6% ($n=3$) for somewhat agree, 4.5% ($n=1$) for neither agree nor disagree, 0% ($n=0$) for somewhat disagree, 13.6% ($n=3$) for disagree, and 4.5% ($n=1$) for strongly disagree. At T2 they were 31.8% ($n=7$) for strongly agree, 31.8% ($n=7$) for agree, 4.5% ($n=1$) for somewhat agree, 13.6%
(n=3) for neither agree nor disagree, 4.5% (n=1) for somewhat disagree, and no respondents for disagree or strongly disagree. Consequently, changes for T1 to T2 were as follows: strongly agree was n=8 (38.1%) for T1 and (42.1%) for T2, moderately agree increased from n=4 (19.0%) to n=7 (36.8%), somewhat agree decreased from n=4 (19.0%) to n=2 (10.6%), neither agree or disagree was n=2 for T1 (9.6%) and T2 (10.6%), somewhat disagree decreased from n=2 (9.5%) to n=0 (0%), moderately disagree decreased from n=1 (4.8%) to n=0 (0%), and strongly disagree was zero for both T1 and T2 (see Table 2).

For question 16, “Practicing skills that I will use in the field is important to me”, there was no change in the number of people who answered “strongly agree”. What did change is that in T1 the rest of the answers were split between the different options, with “Somewhat agree” being the most prevalent answer (n=4). In T2 all other individuals answered “Agree” that did not respond with “Strongly agree” (see Table 2).

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td>n=4</td>
<td>19.0%</td>
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<td>42.9%</td>
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<td>38.1%</td>
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<td>n=4</td>
<td>19.0%</td>
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<td>CE-T2</td>
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<td>36.8%</td>
<td>n=2</td>
<td>10.6%</td>
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<td>61.9%</td>
<td>n=2</td>
<td>9.5%</td>
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<tr>
<td>Q16-T2</td>
<td>n=13</td>
<td>68.4%</td>
<td>n=6</td>
<td>31.6%</td>
<td>n=0</td>
<td>0.0%</td>
<td>N=0</td>
</tr>
</tbody>
</table>

Note. 1=extremely adequate (CB) or strongly agree (Q12, CE, Q16); 2=moderately adequate (CB) or moderately agree (Q12, CE, Q16); 3=slightly adequate(CB) or somewhat agree (Q12, CE, Q16); 4=neither adequate or inadequate (CB) or neither agree or disagree (Q12, CE, Q16); 5=slightly inadequate (CB) or somewhat disagree (Q12, CE, Q16); 6=moderately inadequate (CB) or moderately disagree (Q12, CE, Q16); 7=extremely inadequate (CB) or strongly disagree (Q12, CE, Q16).
For question 18, “How many times prior had a student taken a class in the flipped classroom setting?”, there were some slight variances between T1 and T2. On the assumption that students were more clear about what it meant to have a class in the flipped classroom format further into the semester, T2 is reported. 84.2% (n=16) reported that they had never taken a class in the flipped format prior, with one student (n=1) reporting having taken one class prior, one student (n=1) reported having taken two classes prior, and one student (n=1) reporting having taken more than five classes prior in the flipped classroom format. Communications 495 was given as a class for one student and the two others reported not being able to remember the class name and title.

**Analysis of Reflections and Open-Ended Survey Questions**

From the 22 students in the class 81% (n=18) submitted the first reflection, and 86% (n=19) submitted the last reflection. Of the four missing submissions from the first reflection and the three from the last reflection one student was missing both. Only students who had both reflections were examined. Consequently, 17 (77%) participants’ reflections were included.

First, all identifying information was removed from the reflections including: name, group assigned, professor’s name, class title, major, preferred work placement, and unique historical information to that student. Then, based on the assignment, four coding categories were determined. These codes were (1) emotions, (2) thoughts/beliefs/recalled past experiences, (3) assumptions, and (4) links between self and population. Each code was assigned a color and the documents highlighted accordingly. In the process of labeling the documents based on these codes, a category emerged from the unhighlighted sections of text: expressions of gratitude for the class. This new coding category was assigned a color and all the documents were reexamined and instances of this category were highlighted accordingly. It then emerged that a
code specific for flipped classroom comments was needed. As such, the documents were gone through once more verifying consistency. Statements specifically related to the flipped classroom concept were underlined. Once this was completed, the documents were verified to ensure they were appropriately highlighted for all categories, making any changes as necessary. If there was a phrase that needed more than one code, then parts of the phrase were coded appropriately to indicate that the phrase had both codes. This was also the case if a phrase had three codes. No more than three codes for one phrase were found during this stage of the coding process.

Afterwards, the documents were given to the second coding reviewer who recommended separating out thoughts/beliefs and recalled past experiences. This was agreed upon by the first coder, so the codes were changed to: (1) emotions, (2) thoughts/beliefs, (3) recalled past experiences, (4) assumptions, (5) links between self and population, (6) expressions of gratitude for the class, and (7) flipped classroom comments. The first coder went through all the documents changing them to reflect the new codes. Then the second coder evaluated the documents once more. No other theme recommendations were made, although the reviewer disagreed with the coding of a few phrases (less than five). In all cases the coding was changed to reflect the second reviewer’s recommendations.

A third reviewer then evaluated the coding. The third reviewer pointed out that there were statements in the reflections regarding the writer’s feelings as well as the writer’s assumptions of others feelings. Upon review of this point, it was concluded by the first and second reviewer to add an eighth code labeled empathic statements. Therefore, the ending coding was: (1) emotions, (2) thoughts/beliefs, (3) recalled past experiences, (4) assumptions, (5) links between self and population, (6) expressions of gratitude for the class, (7) flipped
classroom comments, and (8) empathic statements. Aside from this alteration, all codes in all the documents were agreed to except one, giving the coding nearly complete inter-coding agreement.

After the coding was complete, the phrases and codes were scrutinized keeping in mind the purpose of the study— to discover human services students’ opinions and reactions to being placed in a flipped classroom. As such, unless directly related to the flipped classroom environment or the class generally, the codes for (1) emotions, (2) thoughts/beliefs, (3) recalled past experiences, (4) assumptions, (5) links between self and population, and (8) empathic statements were set aside and the focus was placed on statements coded as either (6) expressions of gratitude for the class and (7) flipped classroom comments. This resulted in six students being set aside, as their reflections contained neither (6) nor (7). Therefore, the remaining 11 students reflections were examined focusing on these codes. When completed it was uncovered that there were few statements fitting these two categories from the first reflections. Therefore, all codings from the first reflections were temporarily set aside.

In order to prepare for a comparison of answers given in the survey and what students’ wrote in their reflections, the relevant phrases from the last reflections were placed in an excel spreadsheet along with the open question responses from the surveys. Each statement was summarized, analyzed, and then categorized regarding whether it expressed either a sentiment that was primarily positive or negative in relation to the flipped classroom model. These were then compared to see if there were any similarities between the statements from the reflections and the answers to the surveys’ open questions. Afterwards, the few statements from the first reflection were examined to see how they might compare.
Expressions of Gratitude and Flipped Classroom Comments

The most common expression from the phrases coded as (6) expressions of gratitude for the class were mentions of how much the class style had impacted them. As an example, Student 21 stated,

I feel that by practicing things like this, I am only becoming better at understanding myself so that I am able to better understand others. … Starting my morning with a mindfulness and discussions about topics that I care a great deal about has turned me into a better person.

Another was from Student 19,

Without a doubt, I am much more prepared for whatever advocacy for children I pursue in the future because of this class. It may have been incredibly difficult at times, and the workload was tough for a majority of it, but it was worth the knowledge that I have gained … This class truly created an advocate out of me to protect and serve children and their families in any way that I can.

The phrases coded as (7) flipped classroom comments had a similar tone, as students expressed assessments of how their opinion changed from reluctance or hesitancy to appreciation. For instance Student 13 stated,

The assumptions that I had for this class after the first day was that it was going to be difficult and very different. The reason that I thought this was because I had never heard of or experienced a flipped classroom before … It was not a difficult experience it was more of an enlightening experience to open my eyes to different styles of learning more than just the traditional lecture style class. This type of classroom allowed us to learn
from each other and pick at each other’s knowledge that we may have not known before this class.

Student Four stated in the first reflection, “I am also exited [sic], for this is the first time I will be experiencing a flipped classroom setting. This helps to engage more deeply with material and spend classroom time on practical elements rather than theory.” Then in the last reflection wrote, “I did not encounter the long, boring lectures. Instead, class time was devoted to group work, discussions, and hands on activities. I was relieved! … I enjoyed the flipped classroom setting. It helped me learn and retain more information.”

On the other hand, not all students expressed positive sentiments. Those labeled under the coding (6) expressions of gratitude for the class described the challenge of the work loaded. Student 18 stated, “Reflecting on this class made me think about what made this class so stressful and hard. It was not the curriculum that was too hard, it was the time required to complete this class. I felt like our professor did not realize that we were full time students, who may have jobs, children, or other responsibilities.”

Negative framed statements placed in the coding (7) flipped classroom comments expressed frustrations and particular elements of the flipped classroom type that they did not like. For example Student 18 also wrote,

I did not like the flipped classroom. I did not feel like it was beneficial, I found that class time was wasted just chatting in groups, instead of teaching the material … This class was interesting but I don’t think I will use a flipped classroom in the future.

In another example Student 16 stated,

When I learned this course was going to be taught in a flipped classroom style, I was not pleased. It reminded me of when I took my first online course, where I felt as if I was
basically teaching myself the material then being graded on it. I felt frustrated because I did not like this approach to this course and I knew I had no choice but to continue on in the class.

Yet, the reflections contained multiple statements that reflected the type of development that was the rationale for the study. For instance Student Six in the second reflection stated,

This class has given me so much insight into how to work with this group of youth at risk ... Thank you for the discipline that you have giving me in this class, that I originally thought was not worth my while. I am a must [sic] better thinker and use my time management more wisely. Very helpful class for the field of human services.

Student Seven also in the second reflection wrote, “This course has taught me how to value and look through information given to me and find what I can and cannot use in my future career.”

Additionally from the second reflection Student 15 stated,

From this class I have learned that it is important for me to be aware of my feeling so that I do not expose them to a client especially if they are a child because they can pick up on a lot of things. … From this class I have learned that it is okay to express my emotions, thoughts, and feelings but it needs to be done at an appropriate time and way.

Ironically, there was even one statement in the first reflections in a similar line from Student Three,

I think that the overall schedule and how we are doing a “flipped” classroom will make this class very interesting. Another thing I also like is the idea of a “flipped” classroom ... so this will actually help me learn better than just a regular lecture class. Being able to actually practice what I’m doing actually helps me remember what I am learning and also put it to use in the real world as well.
Open Survey Questions

Added to the qualitative sources placed in the Excel spreadsheet for comparisons were the open questions from the surveys. The majority of responses from the first open question, “In regards to HMSV, please describe your experience with the flipped classroom format,” in T1 were mixed. As an example a student wrote,

It was fun to be able to do activities in class. The downside is having to go over all of the material on my own before class. Most of us have 3 or more other classes as well as jobs, so constantly having assignments can be difficult to manage. Also, activities [sic] in class on cover very small parts of the material we went over. It has increased my understand of the population, though.

Other students wrote, “It has been pretty good overall, but I wish I was being taught inside the classroom more,” and “I was hesitant at first but I have grown to really like this class as well as my classmates and teacher. I do not believe the same experience could have come from this class if it were not taught this way,” and “I have enjoyed the flipped classroom since it has forced me to read more of the material than i [sic] would have if it were not a flipped classroom. I wish that we would have had more class time to discuss the reading.”

The responses to the second open question, “In your opinion, how does taking HMSV 448 in the flipped classroom fit in with your needs as a student?” from T1 were overall positive, with some negative options. For instance a student stated, “It becomes more diverse with different styles of getting information across. Which is good since there is so many topics that need to be covered.” Other students stated, “It doesn't really fit my needs as a student because it puts all the learning on me” and “It helps the student engage more; learning more information. Usually teachers lecture for the whole class period, failing to realize that this bores the student...
and at some point during the lecture, we have stopped paying attention. The flipped classroom revented [sic] the boredom, creating a more exciting, interactive setting.” Another student wrote, “My personal needs as a student are not met. I feel very confused often and I am not able to ask questions right then and there when I am learning the material which is very frustrating. I feel as if the course work to be done outside of class is more than sual [sic] because I have to basically teach myself everything.”

At T2 students’ replies were mostly positive with some negative assessments and a few mixed ones. Some examples of student statements were “Flipped classroom forced me to be open with my thoughts and my peers. To be more confident in participating and not feeling self councious [sic] to discuss” and “I did not enjoy the flipped classroom format. I felt that I missed a lot of valuable information because of it. I feel that I would have gotten more information if we had more lectures” and “I enjoyed the flipped classroom because I felt that it was more interactive than previous classrooms.” Additional statements were, “I have liked it because it has facilitated more discussions rather than simply a lecture” and “I think it is a great idea because I am a hands on learner and I feel like it has helped me learn better and give me a chance to practice what I am going to do in the field” and “It was a lot of hard work in the beginning but I do believe that it paid off” and “Workload is difficult and unrealistic for students taking a full workload and other responsibilities in the beginning of the semester. However it helps at the end. Not sure the end justifies the means, however.”

For the responses to the second open question (“In your opinion, how does taking HMSV 448 in the flipped classroom fit in with your needs as a student?”) at T2 students mainly were as equally positive as they were negative. The positive statements included things like, “As a student in human services it is important to disuss [sic] these skills in depth to make sure the
concept is being grasped,” and “It help you to think more and self reflect,” and “I feel that the flipped classroom benefits Human Services majors so that we have more of an opportunity to practice,” or “Taking this class in the flipped classroom allows for fostering a better understanding of the population in question and for more in-class activities.” While the negative statements included, “It does not fit with my needs as a student, in fact I enjoyed the class and the professor very much but I do not like the flipped classroom idea.” Examples of mixed statements were, “Benefits are class discussions but less time to work on other classes. Not the best format unfortunately,” and “The flipped classroom format is effective but sometimes unrealistic for the increased workload. Many students such as myself struggle to keep up with class and miss assignments or do worse on quizzes due to lack of time to prepare.”

**Common Themes From Reflections and Open-Ended Survey Questions**

As previously examined, while many students expressed appreciation and statements of gratitude towards the flipped classroom model, others articulated a dislike of the model. In some cases the statements of appreciation for the model and against the model were in opposition, for instance some students stating that the model was helpful, while others stated it was not helpful. There were similar contradictions in the open questions from the surveys. As two examples students stated, “It is an interesting system and the increased work with others in class is nice. However, for college, the workload is unfavorable,” and

As a student, I do like the hands on learning and discussing but I would rather have something to refer to such as class notes, power points [sic]. I am learning about the material but it is more a laid back casual way of learning. I would like to be able to test my knowledge and be able to refer.
In T2, although most of the statements were positive, there were still a few mixed responses. For instance, students stated, “Workload is difficult and unrealistic for students taking a full workload and other responsibilities in the beginning of the semester. However it helps at the end. Not sure the end justifies the means, however,” and

I believe it really did help us learn how to be independent workers and get a better feel for what real world jobs we may be working in. The only complaint I have it time. I think this class would be better fit in a 3 hour class because a lot of the in class work felt rushed. Possibly having a teaching assistant to support the instructor during class to make sure all the students needs, questions, and confusions are addressed is also something that could have benefited this issue of time conflict as one person can only focus on so much.

**Comparison of the Two Reflections**

Although the other codings were found to not be as relevant to the purposes of discovering students’ opinions and reactions to being in a flipped classroom (i.e., (f) expressions of gratitude for the class and (g) flipped classroom comments), they were used to compare the same student’s first reflection to the last reflection. It was observed that thoughts and emotions for most students had changed, and their writings included more of their assumptions, presenting a possibility that their own awareness had increased. A similar trend was observed with students’ ability to link their self-perceptions with their potential future work with clients, which appeared to be a manifestation of the analysis stage of Bloom’s Taxonomy and a critical step for deepening human services students’ thinking processes according to Eber and Parker (2007).

For instance in the first reflection Student One wrote,

Even though the individual like me may be aware of the problems faced they could feel incompetent in their ability to know the best answer. An at-risk youth may also feel a lack
of confidence in a human service professional to help them solve the answer and feel hesitant to pick their solutions. Often times youth are aware there are or will be future problems faced but feel unequipped to figure out a solution.

Then in the last reflection the same student wrote,

I see how easily I could have possibly failed with this if I had the same rainbow and butterfly assumptions. If I went in to this career, or any related, I would have gotten a huge reality check that I may not have been equipped to handle. I can see how this unawareness could have affected my competence to do the job and even make me rethink my career choices.

In another example, Student Six in the first reflection stated,

I will do the best that I can in order to be successful at it. Things are not always going to be in black and white, so we as adults have to be ready to handle the unexpected and do the best that we can when it happens. I look forward to more challenges that will make me rise to my best.

In the last reflection the same student stated,

I feel confidence that I can work with these kids with a understanding of some of their behaviors. My first response to the class was anger because of the quizzes, but I know that they helped me learn and that they turned out to be for my own good. I feel comfortable knowing that if I work with at risk kids I will be able to help them with an empathetic understanding, because I know so much more about them now.

In a third example, Student Three in the first reflection wrote,

Being able to actually practice what I’m doing actually helps me remember what I am learning and also put it to use in the real world as well. I feel like this experience would
make it easier for us to relate to at-risk youth which will help them be more comfortable coming to a human service professional for help. I know that some youth might feel like we can’t relate to their experiences or choices, so we can’t really help them. I feel like through this experience it will help us be able to empathize with the at-risk youth so they will be able to open up more to a human service professional.

Then in the second reflection stated,

Even thought this was a class about at-risk youth, I really think that the topics we discussed were so relatable in our age today. I really learned a lot about myself throughout this course and I was not expecting that at all. I can say that I really got to put myself in situations that I never thought about before and it really has made me grow when it comes to the field. Overall, I want to say this has become one of my favorite classes over the semester. I really did have so much fun in this class and especially when it came to our open discussions. This class is one that I will never forget and I am so happy that I was able to take it and learn so much as well.

Overall the changes observed across the reflections seem to indicate that the students were expressing alterations within themselves both cognitively and affectively. There also seems to be a deeper appreciation and investment in the human services field. Additionally, there appears to be a recognition in the value of the class’ format and expectations, despite the irritation felt about them. Furthermore, the last reflection statements seem to show the students’ confidence in their abilities to work directly with at-risk youth.

**Discussion**

The flipped classroom model, according to this exploratory investigation, appears to have promise in human services education. Especially promising is the possibility that this model
might increase students’ preparation for the field as indicated by the students’ self-reports. This was supported in the reflection comparisons. It is also potentially valuable that, overall, students appreciated the benefits of the flipped classroom model in their growth as a student, particularly since that perception seemed to increase over time. The survey results suggest that the students’ perceived that they received more opportunities to practice their fundamental skills by the end of term in comparison to at the mid-term and that their sense of being engage with the classroom also increased. It is important to note that the mean scores increase was greater for CP than for CE.

At the same time, human services educators need to be aware of the resistance the implementation of such a model might have with students (Blair et al., 2016; McNally et al., 2017). Students’ sentiments towards the flipped classroom pedagogical style, both the statement made in the reflections as well as the answers from the open questions in the surveys conveyed a mixed picture of student perceptions. This matches conclusions drawn by Betihavas et al. (2015) and Njie-Carr et al. (2017) after they systematically reviewed flipped classroom articles in nursing higher education, as well as McNally et al.’s (2017) results that there were flipped classroom endorsers and flipped classroom resistors, and Roach’s (2014) that 76% of the students in the flipped classroom said that the model “helped them learn” (p. 83). The complaints reflected by a few students detailing that the flipped classroom model was fundamentally a self-taught course is a critique that needs to be considered, even though many students voiced opposite views. McNally et al. (2017) found that in many cases students come into the classroom with certain expectations of how a class would be conducted and students might struggle to adjust to those expectations. Even if further research were to show stronger evidence of how the flipped classroom model might assist in professional development for
human services students, it is possible that students’ resistance would not alter. Even more
interesting was that the negative statements most often reflected disliking certain aspects of the
class that the students associated with the flipped classroom model (e.g. writing reflections after
every class and taking a quiz every class), while the positive statements more reflected students
appreciation for their growth as students and as upcoming professionals.

Kim et al. (2014) when discussing their nine design principles concluded, given that most
universities use an online learning management system (LMS), that altering traditional
classrooms to flipped ones would not be radical since “most of the nine emergent design
principles appear also to apply to a typical undergraduate face-to-face course” (p. 46). In the
case of this study, their supposition was found to be the case. Although training and
thoughtfulness was needed prior to implementing the course, no additional technical supports
were required. Therefore, from a departmental and administrative perspective there seemed to
be little cost involved in flipping the classroom. Also, since students were already familiar with
the online LMS used at the university, no additional training of the students to engage in the
class preparation materials was required. As such, it is assumed that the study’s findings were
not confounded by those factors, although no information was gathered to confirm or deny this
assumption.

A combination of students’ self-reports via the surveys and disclosures from the
reflections appears to paint a picture that students’ believed the flipped classroom style aided in
their development. At the same time, the mixed comments possibly represent the struggles many
students had with the model. Although pedagogically a classroom that blends in-person
elements with technology was shown to produce the best results (Rehfuss et al., 2015), the
response in this study seem to indicate that students struggled or even resisted how this was
done. Interestingly, these results are similar to those found in other fields as described previously, including the findings that some students disliked changing the classroom environment (Blair et al., 2016).

**Limitations**

The encouraging findings described are limited by the exploratory nature of the project. As such, no firm conclusions should be drawn from these findings. Also due to the study’s exploratory nature, these findings are not generalizable across human services education. However, one important element that should be kept in mind is that the class flipped is a part of the later group of classes with internship often taken the following semester. As this was exploratory and the flipped classroom model had never been conducted in the department previously, most of the students were asked to engage in a new educational model. Therefore, it is quite possible that the findings might have included less negative statements if the model had been introduced in one of the first classes human services students take. For instance the introductory human services course would probably be ideal.

Another limitation of the study was the methods used to collect information from the students. Both instances of the survey were conducted using the data collection program Qualtrics, which might have affected students slowness in responding to the second instance, as it is the same program used by the university to collect students’ opinions regarding their classes at the end of the semester. Additionally, the results reported by Qualtrics gave random identifiers in each instance of a participant’s entries, which prohibited any within-subject statistical analyses. The survey was completely self-report and no measure was used to verify its accuracy. Thus, it is restricted to only describing students’ perceptions and opinions placed within a Likert-scale format.
Also, although the survey results indicated an increase in students’ sense of competencies, there is no way to say if this increase is standard for the class and would have happened in a traditional teaching format. Even though two different sources were used, one from surveys and another from students’ reflections, both were used as means to describe students' perceptions of the Flipped Classroom model employed. Thus, this study is not a true mixed methods study. Lastly, the use of the reflections also comes with its own limitations. The primary limitation is that the reflections are also self-reported. Thus, no observable information on students’ increase in skills was conducted.

Considerations for Future Research

This study offers the field important pedagogical considerations that appear to be worth pursuing in the future. Doing so would be most helpful to human services educators dedicated to developing their students field skills. In order to have a more concrete understanding of using the flipped classroom model in human service classes an experimental or even quasi-experimental study would be useful. Such a study could discover if students’ foundational skills development would significantly increase due to a flipped classroom model in comparison to a traditional teaching model. Additionally, there would be great value in having a study conducted with an observer to report on the nature of students’ skill acquisition in a flipped classroom comparative to a traditional classroom, rather than depending on self-reports.

Given the limitation that the class flipped is often taken as one of the final classes before graduation, there would be value of having students engage in the flipped classroom model in their first courses and observe if this first exposure alters their perception of it. Additionally, given students’ increased value of the flipped classroom model over time, it might be useful to
study if students were exposed to the model multiple times over their evolution as a human services student, if their perception of it would continue to alter over time.

This study was from the outset not intended to be able to draw any definitive conclusions, but rather to offer insight into students’ opinions on an educational model and to explore if students perceived an increased skill capacity. As such, the findings indicate a potential benefit to human services education. Specifically, there are indications of advancing skill development. Consequently, the authors believe that exploring the use and value of the flipped classroom model in human services classes is worth further investigation.
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