2018

Increasing Self-Efficacy through Role Emerging Placements: Implications for Occupational Therapy Experiential Learning

Amy Mattila  
*Duquesne University*

Elizabeth D. DeLuliiis  
*Duquesne University*

Ann B. Cook  
*Duquesne University*

Follow this and additional works at: [https://encompass.eku.edu/jote](https://encompass.eku.edu/jote)  
Part of the [Occupational Therapy Commons](https://encompass.eku.edu/jote)

**Recommended Citation**  

This Original Research is brought to you for free and open access by Encompass. It has been accepted for inclusion in Journal of Occupational Therapy Education by an authorized editor of Encompass. For more information, please contact Linda.Sizemore@eku.edu.
Increasing Self-Efficacy through Role Emerging Placements: Implications for Occupational Therapy Experiential Learning

Abstract
Fieldwork education is an essential component of occupational therapy curriculum design and student development. Today’s students are faced with a variety of challenges in the changing, diverse healthcare system, and educators need to ensure there are placements that best prepare them for these demands. Role emerging fieldwork offers an opportunity to not only meet the curricular requirements of fieldwork education, but also afford students the chance to develop confidence and skills unique to this kind of placement. The purpose of this explanatory case study was to explore graduate occupational therapy students’ self-efficacy before and after a Level I role emerging fieldwork experience, and in addition, the potential personal or professional transformation that occurred as a result. Data was collected from 36 students using a pre-post survey with the Student Confidence Questionnaire (SCQ). The findings revealed a statistically significant growth in each of the seven areas of the SCQ (Risk Taking, Supervision, Communication, Adaptability, Innovation, Clinical Practice, and Professional Competence), which led to an increase in self-efficacy, personal and professional development, and a further understanding of the role of occupational therapy. Results indicated the influential impression role emerging fieldwork leaves on the growth and autonomy of the student and provides a potential solution for programs to meet the accreditation standards for all level of experiential learning.

Keywords
Role emerging fieldwork, experiential learning, occupational therapy, self-efficacy

Creative Commons License
This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License.
Increasing Self-Efficacy through Role Emerging Placements: Implications for Occupational Therapy Experiential Learning

Amy Mattila, PhD, OTR/L
Elizabeth D. Deluliis, OTD, OTR/L
Ann B. Cook, OTD, OTR/L
Duquesne University
United States

ABSTRACT
Fieldwork education is an essential component of occupational therapy curriculum design and student development. Today’s students are faced with a variety of challenges in the changing, diverse healthcare system, and educators need to ensure there are placements that best prepare them for these demands. Role emerging fieldwork offers an opportunity to not only meet the curricular requirements of fieldwork education, but also afford students the chance to develop confidence and skills unique to this kind of placement. The purpose of this explanatory case study was to explore graduate occupational therapy students’ self-efficacy before and after a Level I role emerging fieldwork experience, and in addition, the potential personal or professional transformation that occurred as a result. Data was collected from 36 students using a pre-post survey with the Student Confidence Questionnaire (SCQ). The findings revealed a statistically significant growth in each of the seven areas of the SCQ (Risk Taking, Supervision, Communication, Adaptability, Innovation, Clinical Practice, and Professional Competence), which led to an increase in self-efficacy, personal and professional development, and a further understanding of the role of occupational therapy. Results indicated the influential impression role emerging fieldwork leaves on the growth and autonomy of the student and provides a potential solution for programs to meet the accreditation standards for all level of experiential learning.
INTRODUCTION

Historical Perspective of Fieldwork
Fieldwork (FW) education is undeniably a crucial component of occupational therapy education, as the Accreditation Council for Occupational Therapy Education (ACOTE) continues to set explicit standards governing the FW component of occupational therapy educational programs since 1924. Occupational therapy FW education is often described as a bridge which connects the theoretical didactic classroom instruction to real-world clinical practice and is argued as the most integral piece of the occupational therapy education process (Aiken, Menaker & Barsky, 2001; Brandenburger-Shasby et al., 1998). The intention of FW education is to propel the learner from the role of a student to that of a practitioner. In occupational therapy education, there are currently two levels of FW intended to provide students with this opportunity: Level I and Level II. More recently, curriculum requirements within the entry-level occupational therapy doctoral degree include an advanced practicum experience, currently called the doctoral capstone experience (DCE; formerly referred to as the doctoral experiential component) (ACOTE, 2018).

According to the 2018 ACOTE Standards, the goal of Level I FW is “to introduce students to the fieldwork experience, to apply knowledge to practice, and to develop understanding of the needs of clients” (ACOTE, 2018, p. 40). Standard (C.1.9) states that Level I FW is integral to the program’s curriculum design and includes experiences designed to “enrich didactic coursework through directed observation and participation in selected aspects of the occupational therapy process” (ACOTE, 2018, p. 40). Level I FW can be viewed as an introductory clinical learning experience. It remains the first official experiential learning for occupational therapy students and is a major stepping stone in the building of their professional identities (DeLuliis, 2017). Role emerging placements for Level I FW can be can be important stepping stones to prepare occupational therapy students for future experiential learning (such as Level II FW or the DCE) that require more autonomous learning.

Role Emerging Fieldwork
Role emerging FW is one way to meet the needs of the diverse healthcare climate and provide a unique learning opportunity for students. Role emerging FW is defined as settings that promote occupational therapy at a site where there is not an established therapist or role defined (Mulholland & Derdall, 2005; Thew, Edwards, Baptiste, & Molineux, 2011). Since there is a definite trend in health care practice toward health and well-being of the population and meeting clients where the needs are, the community is a natural fit for occupational therapy (McMurray & Clendon, 2015). Role emerging FW placements for occupational therapy students in the community are also key components in the profession’s efforts to be recognized as a behavioral and mental health profession (Bagatell, Lawrence, Schwartz, & Vuernick, 2013; Clarke, Martin, Sadlo, & de-Visser, 2014).
A review of the literature completed by Bossers, Cook, Polatajko, and Laine (1997) highlights that role emerging FW has existed in the profession for over 40 years; however, much of the literature is outside of the United States and is only descriptive of programs or opinions on the value of these placements. The authors describe role emerging FW as evolving in response to staff shortages, increased caseloads, limited FW placements, and an increased number of students in growing programs (Bossers et al., 1997; Fisher & Savin-Baden, 2002).

In their work in comparing traditional to non-traditional FW, Gat and Ratzon (2014) found that occupational therapy students who engaged in non-traditional FW ranked significantly higher in areas of cultural competence, as well as personal responsibility and skills. In her phenomenological research, Clarke et al. (2014) reported that students had increased ontological development, that is, the ability to create an authentic professional identity that would not otherwise be developed in a traditional setting. Role emerging settings demand a certain level of autonomy that require the students to problem solve and reflect on challenges and choices they make. In traditional settings, students often fall into the routines and practices modeled by their FW educator or as required by facility protocol (Fleming, Christenson, Franz, & Letourneau, 1996). Other researchers cite similar findings of increased self-efficacy in multidisciplinary teams, the use of supervision models, resource and time management, communication and interaction skills, utilization of evidence based practice, and understanding the professional role of occupational therapy (Alsop & Donald, 1996; Edwards & Thew, 2011).

When structured to meet the requirements of the ACOTE standards, role emerging FW is considered equivalent to traditional placements in meeting the needs of the academic program to link theory to practice. Similar to traditional placements, role emerging FW provides opportunities for a variety of contacts with clients; effective communication between students, supervisors and staff; and exposure to service delivery (Bossers et al., 1997; Fisher & Savin-Baden, 2002; Overton, Clark, & Thomas, 2009; Thew et al., 2011; Tyminski, 2018).

**Benefits of role emerging fieldwork.** Many international studies on experiential learning cite significant benefits for students who participate in role emerging FW (Bossers et al., 1997; Fieldhouse & Fedden, 2009; Gregory, Quelch, & Watanabe, 2011; Overton et al., 2009). Some reported unique benefits of role emerging FW include student report of increased confidence, flexibility, autonomy, leadership, and awareness of contemporary health care issues (Banks & Head, 2004; Bossers et al., 1997; Thew et al., 2011). In addition to the professional and personal development, students also grew academically from these placements, citing increased problem-solving abilities and clinical reasoning, due to the nature of their role emerging assignment (Banks & Head, 2004; Fisher & Savin-Baden, 2002).

Occupational therapy has historically rooted itself as a client-centered practice. Law, Baptiste, and Mills (1995) describe client-centered occupational therapy as “an approach to service which embraces a philosophy of respect for, and partnership with,
people receiving services” (p. 253). Students participating in role emerging FW describe unique relationship-building experiences, where they are able to provide innovative, client-centered, occupation-based interventions to the populations served (Banks & Head, 2004; Fisher & Savin-Baden, 2002). Often, these interventions can be provided without the constraints of reimbursement or productivity that would be necessary in a traditional clinic or facility.

The aspect of role elaboration is very important to meet the needs of the American Occupational Therapy Association’s (AOTA) Vision 2025 and provide new opportunities for occupational therapy practitioners in the community (AOTA, 2016a). In role emerging FW settings, students reported feeling empowered by the lack of occupational therapy presence at the site, and their confidence grew as they became the “occupational therapy expert” on creating programming and consultative roles within the site. They also felt that they were able to better define their role on the interdisciplinary team and articulate their own professional identity (Clarke et al., 2014; Thew et al., 2011). Role emerging placements may also contribute to recruitment following graduation. Upon completion of role emerging FW, there has been evidence of increased employment opportunities at the community-based sites, due to the recognized value of occupational therapy services following student programming (Bossers et al., 1997; Overton et al., 2009). As is the case in traditional FW, students tend to seek employment opportunities in FW placement areas, and these placements promote prospective work in emerging practice areas (Totten & Pratt, 2011).

Overall, the evidence of the benefits of role emerging FW suggests that these placements provide positive experiences for both the students and community as a whole, and additionally, raise awareness of the distinct value of occupational therapy. It has also been found to facilitate a transformative process that has a significant impact on an occupational therapy student’s professional identity development, specifically self-efficacy (Clarke, Martin, de Visser & Sadlo, 2015; Mattila & Dolhi, 2016; Wood, 2005). Despite having long-standing and well documented benefits from international occupational therapy scholars, role emerging FW remains an under-researched area in United States occupational therapy programs and aligns with the Occupational Therapy Education Research Agenda (AOTA, 2014b).

**Importance and Background of Self-Efficacy for Fieldwork Success**

Apparent in the literature, self-efficacy can be an essential component of occupational therapy FW and is in need of further investigation (Gage, Noh, Polatjko, & Kaspar, 1994; Santalucia & Johnson, 2010). Self-efficacy refers to a person’s belief in his or her performance capabilities with respect to a specific task or in specific situation (Bandura, 1977). This includes performance capabilities in academic and work settings. Current research indicates a correlation between occupational therapy FW, supervision, and self-efficacy. Andonian (2017) reported an important connection between the occupational therapy FW student’s self-efficacy and meaningfulness of Level II occupational therapy FW supervision. Although Andonian (2017) did not find a direct correlation between self-efficacy and practice setting or population served, experiences where opportunities for personal growth and active decision making are prevalent, were
more closely linked to higher self-efficacy among occupational therapy FW students. Exploring the nature of the effect that role emerging FW can have on the development of self-efficacy in occupational therapy students can provide important information for curricula of current and future occupational therapy programs.

**METHODS**

This study was grounded in the theoretical framework of the Social Cognitive Theory (SCT) to provide a basis for understanding the relationship between student self-efficacy and skill development and a Level I role emerging FW. The three factors of SCT (environment, people, and behavior) are constantly influencing each other and the outcomes of a learner (Bandura, 1997). There is value to the social cognitive approach to learning in FW education. This theory assumes that adults have an intrinsic motivation to learn when the activity is meaningful, directly related to their current life roles, or when they perceive a need for new knowledge and understanding (Bandura, 1977). As far as the relationship with FW placements, educators’ recognition of students’ environments, personal history, and behaviors may influence their understanding of concepts and approaches to learning. The focus of learning from this approach is more about the student’s self-development, such as self-efficacy or “soft skills,” rather than clinical competencies, or “hard skills.”

Based on the background and literature review, the following research questions were proposed:

1. What effect does a role emerging FW experience have on the self-efficacy of occupational therapy students?
2. What personal transformation, if any, do students identify over a 12-week, Level I role emerging FW experience?
3. What professional transformation, if any, do students identify over a 12-week, Level I role emerging FW experience?

**Research Design**

This study utilized an explanatory case study approach to explore the perceptions of Masters-level occupational therapy students before and after their role emerging FW placement. This particular FW was the third of three Level I experiences. Students were scheduled to be on-site for one-half day per week over the course of 12 weeks. In the preceding terms, students’ settings were composed of traditional placements where occupational therapy services were provided to children (FW IA) and adults (FW IB). In this final Level I FW (IC), students were assigned in small groups to community-based settings that did not offer occupational therapy as part of their service menu. Examples of sites included homeless shelters, programs for at-risk youth, long term structured residence (LTSR), a K-12 private school for individuals with mental health disorders, veteran’s programs, inner-city outreach programs, and a psychosocial clubhouse.

Case study research provides the methodological approach to combine the frameworks and analyze information in the realistic setting of FW education. The literature on explanatory research in occupational therapy is also supportive of this method, which provides relevance to the profession. Fisher and Ziviani (2004) proposed a process for
explanatory case study design, which aligns well with healthcare research and occupational therapy. The procedures include the process of triangulation, collection of evidence from multiple sources, and maintaining discovery and flexibility during the approach. Regardless of the specific approach to case study used, the underlying assumption is that this method allows the researcher to construct meaning and themes through multiple methods of data collection. In a review of traditional forms of case study, research instruments included observations, interviews, and artifacts (Yin, 2013). This study added an additional layer of quantitative data, which has not been thoroughly explored in the literature on role emerging FW experiences (Cooper & Raine, 2009; Gat & Ratzon, 2014). Prior to the initiation of the study, approval was obtained by the university’s Institutional Review Board (IRB) and all participants provided informed consent.

Sample
A purposeful sampling of the student body was utilized in this case study. The participants included 39 second year graduate masters of occupational therapy (MOT) students who attended a private university in Southwestern Pennsylvania. Data collection occurred over the course of one semester in which the students participated in the role emerging FW experience. This paper presents data gathered through the survey instrument, the Student Confidence Questionnaire (SCQ) (Derdall, Olson, Janzen, & Warren, 2002). The goal of implementing this instrument was to obtain a holistic view of students’ perceptions of self-efficacy, professional competencies, and overall experience during a Level I role emerging FW placement.

Assessment
The key survey instrument used in this study was the Student Confidence Questionnaire (SCQ). The SCQ was developed by a group of faculty researchers at University of Alberta Occupational Therapy Department and was piloted on 75 occupational therapy students. Based on the pilot study, the scale was found to be highly consistent, with Cronbach’s alpha = .96. The tool was also found to accurately test for confidence, with significant difference in total confidence over time (F (3, 32) = 25.57, p. = .00). Overall, the scale was found to have high internal reliability and validity (Derdall et al., 2002).

This questionnaire asked respondents to rate their feelings of confidence in seven core areas using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire has a total of 40 items that are divided into 7 areas of self-efficacy and was distributed through QuestionPro, a survey software program. The areas evaluated through the 40 items include: Risk Taking, Supervision, Communication, Adaptability, Innovation, Clinical Practice, and Professional Competence. Additional demographic questions were asked, including any previous experience the student had with the type of site they were placed in. To understand the data in relationship to the research questions, each of the areas was divided and further analyzed related to the associated themes, which will be further discussed below.
Data Analysis
Data from the SCQ surveys were analyzed using SPSS, version 23. Descriptive statistics and dependent sample t-tests with significance at .05 were used to interpret the data for the questions in the surveys.

RESULTS
A total of 36 out of 39 available students participated in both the pre-and post surveys. Three students dropped out of the study over the course of the semester and did not complete the post-SCQ. The majority of participants were Caucasian females, aged 20-25 years. Descriptive statistics are provided in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Participant Information (n=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Ethnicity</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
<tr>
<td>American Indian</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>Native Hawaiian</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Nonresident Alien</td>
</tr>
<tr>
<td>Two or more races</td>
</tr>
<tr>
<td>Unknown</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>20-24</td>
</tr>
<tr>
<td>25-29</td>
</tr>
<tr>
<td>30+</td>
</tr>
<tr>
<td>Previous Experience in a Community-Based Practice Setting</td>
</tr>
<tr>
<td>As a volunteer</td>
</tr>
<tr>
<td>As an employee</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

Table 2 provides a full overview of each subsection of the SCQ, to include pre- and post-measures. The data in each of these areas clearly indicates a significant relationship between each of the subsections and participation in role emerging FW (p < .05).
Table 2

*t-test Results Comparing Pre- and Post-Student Confidence Questionnaire Subsections*

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Communication</td>
<td>36</td>
<td>3.88</td>
<td>0.40</td>
<td>35</td>
<td>-7.452</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Post-Communication</td>
<td>36</td>
<td>4.30</td>
<td>0.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Adaptation</td>
<td>36</td>
<td>3.84</td>
<td>0.48</td>
<td>35</td>
<td>-6.297</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Post-Adaptation</td>
<td>36</td>
<td>4.37</td>
<td>0.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Innovation</td>
<td>36</td>
<td>4.01</td>
<td>0.39</td>
<td>35</td>
<td>-5.305</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Post-Innovation</td>
<td>36</td>
<td>4.44</td>
<td>0.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Risk Taking</td>
<td>36</td>
<td>3.85</td>
<td>0.40</td>
<td>35</td>
<td>-4.688</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Post-Risk Taking</td>
<td>36</td>
<td>4.23</td>
<td>0.41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Supervision</td>
<td>36</td>
<td>4.11</td>
<td>0.48</td>
<td>35</td>
<td>-6.026</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Post-Supervision</td>
<td>36</td>
<td>4.45</td>
<td>0.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Clinical Practice</td>
<td>36</td>
<td>3.82</td>
<td>0.50</td>
<td>35</td>
<td>-6.369</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Post-Clinical Practice</td>
<td>36</td>
<td>4.35</td>
<td>0.39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Professional Competency</td>
<td>36</td>
<td>3.58</td>
<td>0.36</td>
<td>35</td>
<td>-6.062</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Post-Professional Competency</td>
<td>36</td>
<td>4.08</td>
<td>0.45</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Research Question 1: Self-efficacy in Role Emerging Fieldwork**

The first research question was developed to further understand the possible development of self-efficacy during a role emerging FW experience. To answer this question, the data from the subsections *Risk Taking*, *Supervision*, and *Communication* were compiled. In each of those areas, there are specific sub-statements that ask the students to rate their confidence on each statement with a Likert scale. *Risk Taking* included four statements, *Supervision* included five, and *Communication* included eight.

Figure 1 displays the mean scores reported in the overall categories before and after participation in this role emerging FW placement.
Figure 1. Student Confidence Questionnaire mean scores related to RQ1.

The data from the SCQ indicated that not only did students report a positive increase in these skills following role emerging FW, but the types of specific skills they rated highest were also of significance. Learning from mistakes, accepting direction and feedback, seeking feedback, and explaining the role of occupational therapy to others were the highest rated skills reported from students participating in this FW. Students reported “Learn from my mistakes during this placement” as the highest item on the entire SCQ assessment, indicating great importance of this kind of learning. Overall, the areas of Risk Taking, Supervision, and Communication were scored the highest, as compared to any other subsection.

Research Question 2: Personal Transformation
The second research question was developed to explore the students' perceptions of personal growth or transformation that may have occurred because of a role emerging FW experience. The SCQ data under the subsections Adaptability and Innovation were further analyzed to understand research question 2. Figure 2 displays the mean scores reported in the overall categories of Adaptability and Innovation before and after participation in this role emerging FW placement.
Figure 2. Student Confidence Questionnaire mean scores related to RQ2.

Again, in these areas, students reported a positive increase in these specific skills following role emerging FW. Highest rated items from these subsections included seeking out information from appropriate resources, re-organizing time effectively when there are unexpected changes, and taking opportunities to use innovative ideas during the placement.

Research Question 3: Professional Transformation
The final research question was developed to explore the students' perceptions of professional growth or transformation that may have occurred as a result of a role emerging FW experience. The SCQ data under the subsections Clinical Practice and Professional Competence were further analyzed to understand RQ3. Figure 3 displays the mean scores reported in the overall categories of Clinical Practice and Professional Competence before and after participation in this role emerging FW placement.
Similar to the first two research questions, students reported a positive increase in the specific skills related to clinical practice and professional competence following role emerging FW. For this section, the highest rated statements included working on a team when roles overlap, analyzing activity, handling considerable autonomy, and planning and providing programs independently.

Of significance in these findings is the types of skills the students are rating themselves as having a high level of understanding. Having confidence in skills such as working on a team when roles overlap or handling considerable autonomy in clinical work are areas that are generally not expected of new graduates, let alone students. It is of interest that the students scored themselves, collectively, above a 4.0 in each of these areas. Based on the outcomes, the researchers further assessed the relevance of this type of placement within occupational therapy program curricula across the United States.

**DISCUSSION**

The findings of this study support the use of role emerging FW as a pedagogy to complement required curriculum for Level I FW and the initiatives outlined in the AOTA’s *Vision 2025* (AOTA, 2016a). The aim of this study was to examine the effect that a role emerging FW experience has on an occupational therapy student’s self-efficacy as well as on their personal and professional transformation. The student responses on the SCQ are supported in the literature about self-efficacy. The significance of the researcher’s results are framed around risk taking, supervision and communication; adaptability and innovation; and clinical practice and professional competency.
Risk Taking, Supervision, and Communication
The findings led to a convincing argument that experiences such as success and failure, interactions and collaboration, and feedback and direction had a strong impact on the perceptions of the FW placement and student growth. Students in role emerging FW placements are required to take risks, by completing tasks and facing challenges that may not otherwise be presented in a traditional FW setting (Clark, de Visser, Martin, & Sadlo, 2014; Thew et al., 2011). Occasionally, interventions or groups that were planned were perceived as “successes” or “failures,” each which increased their self-efficacy. These challenges relate to an individual’s understanding of a mastery experience (Bandura, 1977). Mastery experiences can generally be attributed to one’s own effort and skill. For example, increasing self-efficacy in one’s practice by using therapeutic use of self with a client to build rapport and gain trust or being confident in the foundational skills of clinical practice.

Students may be required to interact and collaborate with various professionals and clients with intent of articulating and justifying the role of occupational therapy in the setting. Furthermore, advanced clinical reasoning may require occupational therapy students to implement techniques not previously used with a client or at a site, risking failure, and implementing the need to adjust if the results are not what was intended (Andonian, 2013; Carrier, Levasseur, Bedard, & Desrosiers, 2015). Building this skill through taking risks and utilizing feedback in a different way can directly impact a student’s sense of success and overall self-efficacy and is consistent with the literature on self-efficacy and vicarious experiences. Vicarious experiences can be described as instances during which individuals model after or judge their capabilities based on the responses and attainments of others, in this case, collaborating through feedback and modelling other professionals at the role-emerging site (Andonian, 2017; Bandura, 1977).

Results of this study also indicated that students placed in role emerging FW settings reported high rates for their skills related to seeking feedback. In order to be successful in experiential learning, students often need to be self-directed, but also be able to seek out feedback and collaboration when needed to guide their experience and developing case-load.

Adaptability and Innovation
Data analysis showed that the highest rated skills that students reported on the SCQ included seeking out information and using their own ideas in practice, which they described were related to creativity and flexibility. Students also demonstrated growth in organizing their time effectively when changes occurred, handling challenges presented, and adjusting to a new setting. In this FW, students were tested in their ability to plan, execute, and problem solve on the spot when things did not go according to plan. Adaptability was one of the areas of greatest increase on the items of the SCQ.

Adaptability and innovation are essential skills for FW education, for the ever-changing healthcare system, and everyday clinical practice of occupational therapy (Duke, 2004; Grenier, 2015; Reeves, Freeth, McCrorie, & Perry, 2002). As Taylor, Lee, Kielhofner,
and Ketkar (2009) discuss, there is also a component of adaptability in using therapeutic use of self, or the ability to modify oneself in any therapist-client interaction. In these role emerging sites, students were often faced with populations or settings in which they had no previous experience. Their ability to adapt to the “unknown” or “unfamiliar” led to a positive personal transformation. Adapting attitudes towards populations with whom students are “uncomfortable with” had a direct effect on their self-reports in this area of the SCQ, but also an impact on their ability to utilize therapeutic use of self. This skill is at the core of the occupational therapy domain and process (AOTA, 2014a).

Additionally, in the SCQ, participants reported significant changes in using problem-solving techniques, taking opportunities to use initiative, and using their own ideas in practice, which also led to an increase in confidence through innovation with personal meaning attached to these soft skills. These findings are consistent with the research of Schmid (2004), who concluded that adaptation, innovation, and risk-taking were all key parts of creativity in occupational therapy practitioners, and that they should be used in everyday practice.

Clinical Practice and Professional Competency
Results of this study indicated that items including analyzing activity, selecting and administering appropriate assessments, establishing priorities, and planning and implementing programs independently were positively impacted by the role emerging FW experience. These competencies are each aligned with assessment measures that rate student success in a Level II FW experience (Atler, 2003), therefore acquiring these skills can better prepare students for any clinical setting or population they encounter in FW education. Having confidence in areas such as analyzing activities, handling autonomy in the workplace, and applying the role of occupational therapy in clinical practice may have a direct impact on the success of these students in many future FW or post-graduation experiences. It also allows students to have a developed view of clinical practice and overall professional competence, leading to a distinct transformation in these areas.

Working on a team when roles overlap was another highest rated item on the SCQ. This is particularly important as interprofessional education, collaboration, and practice are significant foci points for accredited professional curricula and service delivery models (Interprofessional Education Collaborative, 2016). In addition, students were able to provisionally try new roles in this interprofessional setting, allowing them to have a new self-awareness of their skills as a future occupational therapy practitioner. These results provide support to the argument that role emerging FW experiences positively increase self-efficacy and may better prepare occupational therapy students to assume more complex roles in arenas of practice such as primary care, advocacy, and leadership.

Limitations and Suggestions for Future Research
While there were limitations in this study, each offered a variety of suggestions for further research within the academic setting that would provide a more thorough understanding of the impact of role emerging FW on occupational therapy students.
One limitation is that the study was limited to a small sample of MOT students at one university during a Level I FW experience. While the data may or may not reflect the behavior and attitudes of other occupational therapy students in different parts of the country or internationally, the study does provide the possibility for future replication in a wide range of programs. It also does not lend to an understanding of the similar skill sets that are required of all levels of occupational therapy students in various FW or capstone experiences. It would be beneficial to expand the study with an increased sample size and additional programs, particularly those with the DCE. In addition, it may be helpful to replicate the study at a university with a more diverse student population. Many of the changes that occurred in this study were due to unfamiliarity and lack of prior experience with particular populations. If the student population was more diverse in ethnicity or gender, the impact of this placement may result in different outcomes.

Another area for future research would be to follow these students through their Level II FW and DCE to find out how these skills impact their placements or even future practice. While this study reported positive findings in each of the research questions, it would be beneficial to understand how students carry over these skills and to assess potential practice change. In addition to a longitudinal study, a comparison of students in a master’s versus doctoral program would be helpful in understanding the differences in outcomes or perceptions when students are completing the experience at varying levels. Due to the profession’s push towards mental health reform, community based practice, and primary care, it would also be helpful to determine if any of these students obtain employment in these types of settings post-graduation. If these placements assist with changing students’ perceptions on career choice, it would be helpful in meeting the goals set forth by Vision 2025 (AOTA, 2016a).

IMPLICATIONS FOR OCCUPATIONAL THERAPY EDUCATION
The results outline several benefits of a role emerging level I FW experience. As an introductory learning experience, Level I FW in a role emerging setting can help occupational therapy students develop understanding of diverse client and population needs, work towards developing competency in applying the occupational therapy process, and apply and refine aspects of professionalism (AOTA, 2016b). These findings provide insight into the potential benefits of using a role emerging placement at other points of experiential learning, such as Level II FW or the DCE.

The goal of Level II FW is “to develop competent, entry-level, generalist occupational therapists”, to promote clinical reasoning and reflective practice, to transmit the values and beliefs that enable ethical practice, and to develop professionalism and competence in career responsibilities (ACOTE, 2018, p. 41). Level II FW is more regulated than Level I FW, as ACOTE stipulates that the minimum time requirement is 24 weeks for the occupational therapy student and 16 weeks for the occupational therapy assistant student. ACOTE standards also challenge occupational therapy education programs to expose students to a variety of clients across the lifespan and to a variety of settings. Current research suggests that students who completed a Level II FW in a role emerging setting experienced increased skills in occupational therapy practice, improved confidence in their clinical decision making, and demonstrated
interest in pursuing employment in role emerging settings after graduation (Tyminski, 2018). Given the rising number of occupational therapy students and education programs, and a national shortage of practice placements, developing more role emerging FW experiences may be a viable option (Roberts & Simon, 2012).

Beyond Level I and II FW, the addition of the 14-week DCE in the entry-level occupational therapy doctorate (OTD) curriculum affords even greater opportunities for the occupational therapy student. It differs from FW in that the goal of the DCE is to develop occupational therapy practitioners with in-depth skills that coincide with one or more of the following focus areas: clinical practice skills, research skills, administration, leadership, program and policy development, advocacy, education, or theory development (ACOTE, 2018). The DCE creates meaningful opportunities that can positively impact individuals, groups and populations that offer the occupational therapy student opportunities for professional growth. Through mentorship and other specific curricular requirements including individualized learning objectives, the DCE affords the opportunity for future occupational therapy practitioners to design, evaluate, educate, and lead. Results of this study show that the ability to take risks and adjust to the outcome leads to the development of self-efficacy, which can be an important preparatory learning experience prior to the DCE, where students are often incorporating new ideas (Case-Smith, Page, Darrah, Rybski & Cleary, 2014).

Due to the curricular requirements of the DCE and capstone project, occupational therapy students will benefit from having more developed skills with adaptability and innovation (Dickerson & Trujillo, 2009). Occupational therapy doctoral students must demonstrate higher levels of flexibility and creativity in order to structure their time to achieve their individualized learning objectives and complete their DCE and capstone project. As it is a student-driven experience, students need to be disciplined to work efficiently and seek feedback or assistance as needed, especially when faced with challenges. Occupational therapy doctoral students completing their DCE may be faced with challenges such as changes in funding to develop and implement community projects, lack of available resources, inconsistent participation from clients based on access to transportation to the site, or changes in personnel/staff employed at the site. Flexibility, creative thinking, and the ability to seek out information from available resources is needed to overcome these challenges to successfully complete their DCE. Role emerging FW placements are beneficial learning experiences for both personal and professional transformation in occupational therapy students. By placing students in role emerging settings during precursory FW experiences, educators are providing students with the opportunity to gain such skills in preparation for both the possibility of the DCE and even contemporary practice issues that are faced today.

CONCLUSION
As the healthcare environment is ever-changing and the profession of occupational therapy transitions to an entry-level doctoral degree by the year 2027, occupational therapy academic programs will be required to adapt their curricula and ensure that students are prepared for the challenges they will see in experiential learning, as well as an advanced degree that will require new standards are met.
Role emerging learning experiences in occupational therapy curricula help support the current FW crisis shortage, yet also meet AOTA’s Vision 2025, which challenges the profession to expand its reach and impact, prepare and develop the profession, and advance quality and recognition of occupational therapy practice (AOTA, 2016a).

Role emerging placements offer an opportunity for occupational therapy students to learn from failure, which can be a crucial experience for the development of self-efficacy and ultimately, successful entry-level practice.

The results of this study provide support for consideration of using role emerging sites for FW education to better prepare occupational therapy students for the DCE. As programs transition to meet the ACOTE mandate (ACOTE, 2017), the DCE affords opportunities to have role emerging placements, since the experience itself does not necessarily require direct supervision. Occupational therapy doctoral students will need to be self-directed in their learning as they complete their DCE and a culminating project during this experience.

These results also provide the opportunity for additional inquiry to identify the further benefits and opportunities of using role emerging placements as a “signature pedagogy” in occupational therapy education (AOTA, 2014b).

Role emerging placements have value not only for FW students’ professional identity development, but also for the evolving curricula for experiential learning that coincides with the ACOTE mandate. It is hoped that more occupational therapy programs will be encouraged to utilize role emerging placement sites within their curriculum design.

References


