GRACE: An Innovative Program of Clinical Education in Allied Health

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This paper describes the Gribble Rosenwax Advanced Clinical Education (GRACE) program that has resolved the 15 year-old issue for one occupational therapy (OT) program of an undersupply of practice placements for OT students who, without completing 1,000 hours of placement, cannot graduate. Based on relationship marketing, Gribble and Rosenwax's approach to reforming clinical education was innovative by regarding potential host sites as *offering the School a service by hosting students* to one of regarding each host site as a *partner* in the clinical education process. Relative to the previous clinical education program, GRACE enhances student learning experiences primarily through the cultivation and enrichment of key relationships with host placement sites; by the appointment of a Clinical Education Coordinator at each host site to oversee student placements; and the provision of clinical education as 42 consecutive weeks of the year, rather than intermittently , and thus ensuring continuity for consumers and closer supervision of students, particular those students with performance issues. Now in its second year, one indication of GRACE's success is that all placements for 2009 (n = 490) were allocated to students earlier than in previous years. GRACE offers shared responsibility for clinical education between host sites and the School which has cultivated mutually beneficial relationships, resulting in improved outcomes for student learning and enhanced services for consumers. J Allied Health 2009; 39:e11 – e16.

Within the allied health professions there is an expectation that entry-level graduates have a defined level of clinical and professional competence.[1,2,3] As such, most allied health degree programs include clinical education as a major component within their curricula. Clinical education offers students the opportunity to prepare for professional practice by successful completion of supervised placements, thus offering progressive acquisition of skills and knowledge under the guidance and supervision of a qualified clinician(s). While prized by students and valued by the profession, the provision of clinical education within allied health programs presents an array of difficulties in supervision, coordination and management for tertiary institutions and host fieldwork sites alike. To date, minimal evidence has been presented in the literature regarding the structure and guidelines for effective clinical education programs that result in successful outcomes for the key stakeholders - students, host sites, supervisors, universities and consumers. Yet over the past decade the challenges facing clinical education from the perspectives of the key stakeholders have been well discussed. These include, but are not limited to, shortfalls between the number of placements required by students with those offered by host fieldwork sites; difficulties in finding enough suitable, willing clinicians to supervise students due to issues with staffing; the lack of resources for hosting students; the excessive workloads of clinicians who are also asked to supervise student(s); inconsistencies in the skills of clinicians who act as supervisory therapists; inequities in expectations of students in different sites; difficulties in the standardization of clinical supervision across many supervising clinicians working in a variety of host sites; lack of appropriate recognition given to clinical educators; lack of career promoting opportunities resulting from involvement in clinical education; and staying abreast of the ever-shifting healthcare and social service practices, political agendas, policy changes, educational priorities and workforce shortages.[5,6,8,9-17] Few clinical education management programs provide insights into minimizing the problems experienced by many involved in delivering clinical education in an allied health curriculum.[4,5,6,7]

Catalyst for Change

The catalyst for the innovations in fieldwork program management at the School of Occupational Therapy (School) described in this paper was 2005. With growing pressure from the university to increase enrolments, the final year cohort in 2005 was over 100 OT students requiring more than 400 placement offers for that year. Due to a lack of offers from host fieldwork sites, students were allocated placements only one

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week before the scheduled placement start date and in some cases students commenced placements late; diminishing preparation time for students and supervisors and resulting in inadequate learning conditions for students. A bottleneck that compounded the undersupply of placements was that all final year students required fieldwork placements at exactly the same time – a pattern familiar to most clinical education programs.

Until the implementation of the new GRACE program, fieldwork placements were sourced by university academic staff via mail-outs and emails followed by hundreds of phone calls to potential supervisors at local fieldwork sites in an effort to persuade them to host students. Rather than academic staff concentrating on teaching and learning activities that supported students before and during fieldwork, or undertaking research, many academic staff were focused on telemarketing tasks. In 2005, 123 individual fieldwork sites were used; spreading academic staff thinly over so many placement sites resulted in further stress, inefficient time use and diminished quality of relationships between the university and fieldwork supervisors.

Additionally, students undertook full-time placements in their third year before all theory and applied units had been completed resulting in some fieldwork placements becoming more observational than action learning oriented. Full-time fieldwork placements of varying lengths were scattered throughout the curriculum - i.e. third year included a six-week placement while fourth year required a five week placement, followed by an eight-week placement and then a four-week self-directed project-based placement. Additionally, the annual changes to placement dates on the clinical education calendar impacted key stakeholders' ability to plan their human resources resulting in numerous fieldwork placements being cancelled.

The centralized management of the clinical education program had resulted in significantly reduced face-to-face contact with key stakeholders such as supervisors, heads of therapy departments and allied health support staff. The combination of poor relationships with sites, growing student numbers, an inconsistent annual calendar, inadequate preparedness of students due to late allocations and undertaking placements in sites without the prerequisite theory and content resulted in a clinical education program providing sub-optimal learning opportunities for students. As a result a comprehensive review of clinical education was commenced in 2006 involving all key internal and external stakeholders.

Relationship Marketing in the Development of the GRACE Program

The Gribble Rosenwax Advanced Clinical Education (GRACE) program was drawn from relationship marketing theory, with a touch of blue sky thinking. This paper describes the GRACE program and provides preliminary effectiveness results following its second successful year of implementation.

Wong and Sohal[19] describe relationship marketing as a company's efforts oriented towards attracting, maintaining and enhancing customer relationships, while Buttle[20] and Payne[18] viewed relationship marketing as the development and maintenance of mutually beneficial long-term relationships with strategically significant customers. The development of relationships should be viewed as a complex task requiring time, patience, determination and personal and team ability, resulting in a level of commitment from key stakeholders.[21] As such, the authors determined that clinical education sites could no longer be viewed as *offering the University a service*, rather, sites and key staff were to be an integral and valued *partner* in the clinical education process. As a consequence of this new direction it became necessary to calculate key motivational drivers, namely:

- why would host site staff want to be involved in clinical education?
- how could host sites gain substantial benefits from hosting students?
- how could host site staff gain professional skills through hosting students?
- how could the loyalty of each host site be leveraged to ensure students would be offered placements year after year?

Exponents of the relationship marketing model would view the frenetic canvassing for student placements as a short-term strategy that would ultimately lead to disharmony among key stakeholders. Additionally, relationship marketers would frown on the practice of excluding host sites from discussions on the guiding principles related to clinical education, a practice that is typically overlooked in the clinical education literature.[12-14] In resolving to rectify these problems we defined our primary goal to be the cultivation and enrichment of long term relationships that would be of maximum benefit to stakeholders. We realized we needed to create a set of shared guiding principles regarding clinical education that were agreed between the School and key stakeholders. [21,2] The relationship marketing framework also contends that mutually beneficial relationships can be achieved by offering three 'drivers'; economic incentives, interpersonal relationships and access to resources not offered by competitors. Thus, these drivers were utilized to create the guiding principles for the GRACE program (Table 1).[21,2]

The GRACE Program

Coherence of the GRACE program has been achieved through its design. All full-time clinical education placements have been moved to the final year of the curriculum. In GRACE, the calendar year has been divided into six placement 'blocks', with a month break from mid-December until mid-January in any one year (Figure 1). All blocks are seven weeks in length with a one week break between each block. Final year Bachelor of Science (Occupational Therapy) students undertake their clinical placements in four of the six blocks, while graduate-entry Master of Occupational Therapy

(GEM) students undertake their clinical placements in the final three of the six blocks; resulting in concentrated clinical experiences for students and easing the transition from student to practicing professional.

Previously students were on placement for 17 weeks in succession changing placement three times. Thus, creating more fieldwork blocks than the required number of placements per student resulted in only two-thirds of undergraduate students out on placement at any one time; reduced the demand on host sites by one-third, and most importantly, provided students with flexibility for when placements are completed (and honors students can plan data collection, analysis and thesis write-up). GRACE allows breaks of one to 14 weeks between placements allowing students to be fresh for new learning experiences. Another innovation of GRACE is that all blocks are consistent in length - seven weeks, so supervisors and students experience no confusion over the length of any placement. The mean length of placement has increased from 215 hours (5.3 weeks) in 2005 to 262.5 hours (7 weeks) in 2009. With GRACE, the clinical placement calendar can be planned years in advance allowing students to organise work commitments. Host sites and supervisory therapists can effectively and efficiently plan human resources; resulting in enhanced preparedness.

The most noteworthy innovation that enhanced productivity, cost-savings and job satisfaction for the academic staff was the negotiation of annual contractual agreements with host sites. Known as Clinical Education Coordinator (CEC) sites, the contractual agreement defines the number of students a site will host while defining remuneration for hosting students (AUD$500 per student in 2009) and the roles of the CEC and university staff.

In 2008, the 18 CEC sites accounted for 54 per cent of all full-time placements, increasing to 64 per cent in 2009 with plans for a ceiling of 70 per cent of placements in CEC sites in the future. In 2009, 64 sites have been utilized for the 486 student placements as compared to 123 sites in 2005 - a 92% reduction, allowing enhanced quality control by the School. No self directed projects are utilized, resulting in all placements being supervised by an occupational therapist.

The CEC sites are remunerated for hosting two or more students in each of the six blocks. In return, a Clinical Education Coordinator is selected by each host site to work in collaboration with the School's academic clinical education team to deliver a smooth student placement. Due to the availability of a CEC at the majority of host sites, students now benefit from each CEC who must plan and conduct the clinical orientation for the students at the host site; contact supervisory therapists to review the student progress; assist supervisory therapists who are new to supervision; meet with students before and during the placement; set preparation readings and tasks for students; coordinate tutorial sessions on relevant topics pertinent to the students learning; observe and evaluate student performance; pursue formal discussions with the school's director of clinical education with regard to any problems or issues; review the overall placement experience for the students and the supervisory therapists; and implement any necessary changes to enhance the next planned placement experience. Any issues and/or performance problems with the student and/or the supervisory therapist are directed to the Clinical Education Coordinator. Beyond this, significant student performance issues have the support of the School's clinical education experts to assist with mediation and problem-solving.

TABLE 1: The guiding principles of the GRACE program

Valued Interpersonal Relationships
1. Shared responsibility for the clinical education of students between the School of Occupational Therapy and Social Work and key stakeholders – i.e. university and School management, academic staff, fieldwork site supervisors and employers.
2. Enriched customer relationship management through the allocation of a key contact within the School and host sites.
3. Timely allocation of students to sites to allow for ample preparation for all key stakeholders.
4. Flexibility in placement allocation for students requiring special consideration.
Economic Incentives and Access to Resources
5. Recognition and reward for supervisory therapists and departments through token remuneration in return for hosting students. Sites agreeing to host significant numbers of students per year would be financially rewarded.
6. Recognition and reward of each fieldwork site's role in clinical education, appointing a site-based Clinical Education Coordinator and the provision of customized training programs for supervisory therapists.
7. Potential for students to be onsite from January to December of each year allowing continuity of service delivery for consumers.
8. Access to academic fieldwork experts within 24 hours for students identified with performance issues.
9. Assurance of a duty of care to consumers that students commencing full-time placements have completed all relevant coursework ensuring students are ready to learn and practice on Day One of the placement.

GRACE allows host sites to supervise students throughout the year so that programs for clients and patients can commence with one student and then continue through the next rotation of students. Students are allocated to sites for an entire year; delivering service to consumers instead of sporadic provision of occupational therapy services as per the previous clinical education calendar. This works particularly well in aged care facilities, pediatric units, rehabilitation units, mental health, health promotion, research and community rehabilitation sites.

On completion of each of the six blocks, students participate in debriefing tutorials facilitated by School academic staff. Here we introduce another novel feature of our GRACE program, the handover of caseload, project/s and physical orientation from each student leaving a CEC site to the students about to commence at the same site. By moving some handover responsibilities from the supervisory staff/host

TABLE 2: Benefits to students and supervisors of GRACE relative to the previous program

	Benefits	Discussion
STUDENTS	Flexibility and choice in placement timing	Students are now allowed some choice in placement host site(s). Additionally, due to early allocation of placements, students are now able to plan their final year in advance knowing when they will be on placement and when they will have two seven-week breaks during the year. This particularly suits Honors students who only complete three blocks, international students, students with rural and international placements and students with employment and family responsibilities.
	Enhanced work readiness	The final year is now a pseudo-internship year with the primary focus on the professional practice of occupational therapy, enhancing the work-readiness of graduates.
	Equity	Students requiring special considerations due to personal or medical issues have greater flexibility than students in the previous program; a student who requires a part-time fieldwork placement can extend the clinical placement over two blocks in order to accumulate the 260 hours of experience required for each block.
	Assistance for students who fail a placement	Students who fail a placement can repeat a placement in any free block, reducing the time penalty for failing a unit. In the previous fieldwork model, students failing placements were required to repeat fieldwork placements in the following year, subsequently delaying graduation and registration as an occupational therapist.
	Quantity and quality of supervision	All placements are supervised, with self directed projects offered as an option and not a requirement. The number of sites used for placements in a calendar year is reduced, allowing greater quality control of supervision.
SUPERVISORS	Access to professional development and training programs	All supervisory therapists and CECs have access to training programs related to student supervision and the management of student with performances issues. CECs have free access to professional development offered by our School.
	Continuity of service	GRACE offers placements throughout the year from mid January to mid December allowing sites to utilise students for 42 weeks per year if required (six blocks of seven weeks with a one-week break between blocks). The previous program only offered placements in the later half of the year and host sites where not guaranteed student postings.
	School has the responsibility for failing students	While supervisory therapists complete evaluation forms for each students, the School makes the final decision on whether a students fails a placement or not, taking the responsibility away from supervisory therapists/CECs. In the previous program, the onus was on the supervising therapist to make the decision.
	Recognition	Each CEC is appointed as a University Associate of the University allowing access to library facilities, academic staff and the most extensive occupational therapy assessment and measurement resource learning centre in Western Australia. In the previous model, there was no method by which to recognize the extra efforts of clinicians who were involved in clinical education.
	Less time spent on orientation to host site and caseloads	At the end of each placement, students return to the School for one day to hand over their caseload to students about to start their placement, thus saving supervisory therapists time that was previously spent in conducting student orientations to the host sites.
	Access to School staff and a partnership model with host site	At all times while students are on placement, the CECs and supervisory therapists have access to guidance and support from the School's Director of Clinical Education or other academic/administrative School staff.

sites/CECs to the students we aim to enhance student learning, encourage professional behaviors and make students more accountable and responsible for their placements.

To address a concern of the clinical community around the lack of clinical experiences for students during the first three years of the degree program, GRACE significantly increased community and clinically based assignments, observation visits and client interactions in the years before the pseudo-internship. The additional experiences total between 200 – 250 hours and consist of a variety of learning experiences in a range of sites.

Table 2 outlines further benefits of GRACE over our previous clinical education program for students and supervisory staff.

Discussion

From the perspectives of all stakeholders, GRACE has been an effective innovation due to the streamlining of operations while enriching the opportunity for students learning. An example of the effectiveness of GRACE is the stakeholder acceptance and uptake of the CEC role. GRACE enabled the

FIGURE 1: Clinical education schedule for undergraduate, honors and Master of Occupational Therapy students in 2009

	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Bachelor of Science (OT) [1]	7 weeks	7 weeks	7 weeks	7 weeks	7 weeks	7 weeks
Bachelor of Science (OT) [2] Honors	20 January - 6 March 2009	16 March - 1 May 2009	11 May - 26 June 2009	6 July - 21 August 2009	31 August – 16 October 2009	26 October – 11 December 2009
Master of Occupational [3] Therapy						

1 BSc(OT) students complete four of the six blocks

2 BSc(OT)(Hons) students complete three of the six blocks and collect data, analyze data and write-up their honors projects during the other blocks

3 Master of Occupational Therapy students complete the final three blocks

allocation of all 2008 placements in December 2007 (n=445 placements) and all 2009 final year students (n=490 placements) in October 2008. Allocations were completed two to 10 months ahead of time; a situation that would have been deemed impossible to achieve several years ago. As the profession of occupational therapy is a complex combination of skills, attitudes and behaviors, the increased mean length of placement has had a significant influence on student learning, as assessed by student feedback.

There is now an oversupply of placements for the OT program. With GRACE offering an enriched customer relationship management program, now all students have commenced placements on time. Additionally, the stress placed on School clinical education staff to find supervisors/host placement sites has been greatly reduced; allowing more time for more traditional academic activities that are essential for academic promotion (research, teaching and learning). Since GRACE was introduced in 2007, there has been no turnover of School clinical education staff. At the same time, the number of academic staff allocated to the clinical education program has decreased from 3.4 full time equivalent (FTE) staff in 2005 to less than 1 FTE in 2009 with the remuneration costs to CEC sites being accommodated into the budget with ease.

The new model has enabled early identification of students at risk of failing. Between July 2007 and June 2008, fieldwork staff identified 14 students as having significant performance issues prior to the midway evaluation; however, the performance management actions resulted in no undergraduates and only one GEM student failing a placement. This is due primarily to the CECs who have been able to identify students with performance issues early in the placement and then follow this up with timely interventions assisted by clinical education experts from the School.

Concerns voiced by key stakeholders in early 2006 during the School's review of occupational therapy practice placements have been addressed. We have found that the profession no longer complains about the School's reliance on all students completing ad-hoc self-directed projects. Consumers can be assured that students have completed all relevant coursework before entering full time placements. In addition, students can seek employment as therapy assistants when not on placement to attain valuable exposure to further clinical experience and assist the workforce shortage for host sites.

Importantly, the guiding principles formulated during the development of GRACE offer a starting point for benchmarking our clinical education program from one year to the next and against other programs, both within the discipline of occupational therapy and within allied health in general.

Limitations and Future Directions of GRACE

Now that GRACE is operational, there is need for a comprehensive, rigorous, measurable evaluation of the program from which modifications, be they minor or major, can be made. To date, such an evaluation of GRACE has been based on the number of students requiring placements against the number of placements offered by host sites, the timeliness of offers, whether or not all students have been able to commence placements on time, and whether or not at-risk students have been assisted in a timely, thorough manner. One limitation of GRACE is the difficulty of some host sites to offer two placements per block and, thus, be part of a contractual agreement for a CEC – resulting in possible disenfranchisement that must be addressed in other ways by the School. Additionally, some sites miss out on being a CEC site as we are over supplied with placements. Anecdotal feedback from some clinicians is that certain students develop better when placements occur in both third and fourth year. However evidence from student results so far prove otherwise, and we understand that any change requiring a cultural shift for a profession can be challenging at the beginning. The stakeholders who have CEC agreements (64%) benefit substantially from GRACE through better organization and forward planning; reassuring us that we the primary aim of developing a new model of clinical education has been addressed. As for the future directions of GRACE, a project will be commenced to grade student competencies as they progress through the four placements and a new administrative database will be introduced to produce timely reports relevant to our needs.

Conclusion

The GRACE model resulted from a complete overhaul of a clinical education program. By involving key stakeholders to assist with addressing the dire situation that faced the clinical education of Curtin University occupational therapy students in 2005, the GRACE model, based on key guiding principles, blue sky thinking and relationships marketing principles, was

established. The model required key stakeholders to embrace radical change that affected the organization, planning, delivery and supervision of clinical education to final year students. The result of this overhaul is a model of clinical education that has addressed most problems typically described in the literature relating to the delivery of clinical education programs. The outcome has been achieved through enriched relationships between host fieldwork sites and the university, together with formalized contractual agreements, economic incentives and access to university resources. GRACE has given rise to a sense of loyalty between industry and the university that ensures that these ongoing partnerships can deliver competent graduates.

The GRACE model has been applauded by our accrediting body, host sites, Clinical Education Coordinators, supervisory therapists, students, consumers and staff in the School. It has formalized placement allocation allowing time for academic staff to devote to students on teaching and learning matters and to assist students with performance problems. GRACE has cemented a true partnership, with shared values, with host sites. Most importantly, it has revolutionized the organization of placements, providing host sites with a continuity of service over the 42 weeks of the year, the ability to forward plan and ensure that consumers are the beneficiaries. We suggest that any allied health program that is considering significant modifications to their clinical education program formulates their own set of guiding principles, in conjunction with industry, to develop a model that is beneficial to all stakeholders.

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