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Development of a Peer-Teaching Mentoring Programme using SMART Goals

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Abstract

This study reports on a project that adopted a social constructivist approach and SMART goals to develop a successful peer-teaching mentoring program to support year ten students' leadership growth and peer-teaching skills and year six students' connectedness to their school and peers. Doran (1981) developed the SMART goals approach as a guided process to develop a project's desired goal. The SMART goals, S-Specific, M-Measurable, A-Achievable, R-Relevant, and T-Timely, were used to develop the pedagogical artifacts for the peer-teaching mentoring program and facilitate sharing knowledge, skills, and experience. The study used the SMART goals to map the developing stages. It was divided into three stages: 1. Developing the characteristics and pedagogical artifacts, 2. Preparing the program with the school, and 3. Developing surveys and interview questions for data collection and future program analysis. The paper argues that using the SMART goals can help articulate and develop pedagogical tools on peer-teaching mentoring models that address the essential stages and characteristics for facilitating the sharing of knowledge, skills, and experience.

Keywords: SMART goals; school & peer connectedness; peer-teaching mentoring; middle-school; leadership

Introduction

This article details the development of a peer-teaching mentoring program, a response to a request from a Far North Queensland school to enhance middle school students' connectedness to their school and peers as part of their pastoral care program. The program, successfully developed and completed in 2021, was a testament to the collaborative efforts between the first author (a researcher), the year ten and six-level coordinators, and other administrative staff. The focus was on year ten students' leadership growth and year six students' connectedness to the school and peers. The results from this program will be reported in other papers, further highlighting the ongoing commitment to this initiative.

Before developing the program, a scoping review was conducted to identify evidence gaps and suggest future research needs in the Australian context. The review searched databases within the date range of 2010-2020 using the terms mentoring, leadership, and connectedness (Suleman et al., 2021). It revealed that while cross-age and peer mentoring approaches, transition programs, youth mentoring, and cross-age

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peer teaching models are well-understood, peer-teaching mentoring models specifically designed for leadership growth and school/peer connectedness are not. The review identified characteristics of peer mentoring programs that contribute positively to leadership and school/peer connectedness. These characteristics were deemed essential for achieving the program's outcomes: (1) promoting consistent participation of mentors and mentees, (2) incorporating mentor training and activities tailored to student needs, (3) focusing on positive interactions, and (4) focusing on developing peer relationships and social skills (Archard, 2012; Burton, 2012; Carlisle, 2011; Garringer, 2010; Karcher, 2005; Karcher et al., 2002; Quimby & DeSantis, 2006).

The peer-teaching mentoring program, developed in 2021 for year six and year ten students, focused on these four characteristics. SMART goals informed the action plan for developing the pedagogical artifacts used in the program. This paper reports on developing the peer-teaching mentoring program, including the artifacts underpinning these characteristics and the preparation needed to implement the program within the school.

Characteristics of a successful peer-teaching mentoring programme

The ensure the effectiveness of the peer-teaching mentoring program, it was essential to focus on four characteristics identified in the scoping review. These include (1) promoting consistent participation of mentors and mentees, (2) incorporating mentor training and activities tailored to student needs, (3) focusing on positive interactions, and (4) focusing on developing peer relationships and social skills. Each of these characteristics enhanced connectedness to the school and peers, thereby supporting the overall success of the mentoring program.

(3) Promoting consistent participation of mentors and mentees

Karcher (2005) revealed that mentoring programs' success depends on consistent participation. This means that connectedness to school and peers is enhanced when mentors' and mentees' attendance is consistent throughout the program. Archard (2012) believes that "inconsistent attendance by mentors could do more harm than good to the mentee" (p. 457) than if they had never had a mentor in the first place. In addition, a failed program frustrates parents, students, school administrators, and staff, and it "can sour an entire community on mentoring for a long time" (Garringer, 2010, p. 3). To address this, mentors and mentees must be encouraged to attend every session to ensure the active development of relationships (Karcher, 2005). This agreement can be flexible, allowing for illness or other personal issues, but the intention of consistent participation is set.

(2) Incorporating mentor training and activities tailored to the student's needs

Activities that address the students' needs will likely ensure their buy-in and connectedness to the school and peers. These activities should also encourage discussion between mentors and mentees to allow them to learn more about each other and provide opportunities for mentors to act as role models to their mentees. Quimby and DeSantis (2006) define role models as "people whose lives and activities influence another" (p. 297). Furthermore, like mentoring, role modelling may be a "deliberate or informal arrangement" (Archard, 2012, p. 455). The five topics the mentors covered duri"g their peer-teaching mentoring training included expectations, goal setting, listening and communication skills, problem-solving skills, and cultural awareness. With these skills, the mentors will peer-teach the mentee activities that encourage connectedness while practising their new skills knowledge (Burton, 2012; Cohen et al., 2001; Karcher, 2005). Therefore, it is essential to develop activities that could enhance the mentors' leadership skills and create peer-teaching activities that cater to students' needs while developing positive relationships.

(3) Focusing on positive interactions

A school-based mentoring program focusing on positive interactions is more likely to enhance connectedness to the school and peers. The positive interactions in the program can include an "intervention of caring and support" (Garringer, 2010, p. 2) as a priority. Burton (2012) suggests that peer-teaching in a school environment that focuses on positive interactions can show a positive impact on the mentee's learning and behaviour"and peer

mentors adapting to becoming better students (Cohen et al., 2001; Davies et al., 2015; Goodlad & Hirst, 1989; Gordon, 2005; Karcher et al., 2010). Positive relationships build self-esteem, which leads to further growth in school connectedness. This peer-teaching mentoring program developed the leadership skills of the mentors, giving them the confidence to do better in their everyday dealings with their school, their peers and within their community while building their peer relationships with their mentees.

(4) Focusing on developing peer relationships and social skills

A peer-teaching mentoring program that focuses on enhancing peer relationships and social skills is likely to meet the needs of middle-school students and make them feel better connected to their peers. Carlisle (2011) demonstrated that implementing an advisory mentoring program that included problem-solving, cooperation, and service-learning enhanced healthier relationships. Carlisle's strategies increased positive relationships with peers and teachers and a better connectedness within the school community. Similarly, Davies et al. (2015) highlighted that the "development of social skills" increased "connectedness and a sense of inclusion" (p. 37). Therefore, the peer-teaching mentoring program had a social aspect to the learning within any mentoring program, where a student's connectedness to school can influence their self-esteem and identity development (Karcher, 2005). The year ten mentors are role models who could influence the growth, self-esteem, and connectedness of the year six mentee students. The following section discusses the development of the peer-teaching mentoring program to help create a better connectedness for the mentees and leadership knowledge and skills for the mentors using SMART goals.

The development of the peer-teaching development programme using SMART goals

A social constructivist approach was used to underpin the development of the peer-teaching mentoring program. Lev Vygotsky (1978, p. 57) introduced social constructivism and suggested that "every function in the child's development appears twice: first, on the social level and, later, on the individual level, where knowledge develops from social interactions". For Vygotsky, the environment in which children grow up will influence how they think and what they think about by sharing and negotiating socially constituted knowledge. Similarly, Shepard (2000) believed development and learning were social processes formed by the knowledge of real-world settings and experiences. Vygotsky (1978) proposed that More Knowledgeable Other (MKO) refers to anyone with a better understanding or higher ability than the learner to a particular task or concept. This does not have to be a teacher or parent, but as in the case of this research, the mentor, with the support of the teacher in the room, could be deemed as the MKO. Another term that Vygotsky defines is the Zone of Proximal Development or ZPD. Vygotsky describes ZPD as the range between what a child can do independently and what a child can do with the guidance and support of an MKO. Drawing on the understanding that knowledge will be co-constructed between the mentees, mentors and their teachers, the following learning environments were 3argeted to ensure that: (1) knowledge would be shared between teachers and students, (2) teachers and students would share authority, (3) the teacher's role is one of a facilitator or guide, and (4) learning groups will consist of small numbers of heterogeneous students (Tam, 2000; Vygotsky, 1978). Therefore, the SMART goals approach was used in periodical consultation with year-level coordinators and other staff at the North Queensland school to plan and integrate the characteristics of an effective peer-teaching mentoring program. Ensuring effectiveness for developing a program of leadership and connectedness to school and peers.

Method

As noted above, the project adopted a social constructivist approach. It employed SMART goals to develop a peer-teaching mentoring program that supports year ten students' leadership growth and peer-teaching skills and year six students' connectedness to their school and peers (Doran, 1981; Vygotsky, 1978). The program was developed collaboratively between the researcher, the year ten and six-level coordinators, and other administrative staff. The guiding question for the study was: What peer-teaching mentoring program supports year ten

students' leadership growth and year six students' connectedness to the school and peers?

Ethics approval was sought and received from the institutional ethics committee prior to conducting the project (H8122). Following ethics approval, the researcher and school-based teachers met three times for an hour over two school terms to reflect on and develop the peer-teaching mentoring program protocols. Data collected during these meetings included reflective interpretations of experiences, practices, and reviews of the peer-teaching program artifacts. The collaboration and development were guided by SMART goals: Specific, Measurable, Achievable, Relevant/Realistic, and Timely (Doran, 1981).

IG – Initial Goal

To begin the process, the SMART chart recommends establishing articulated objectives to ensure the program's goals and purposes are understandable. For the mentoring program, the goal in Table 2 (***see Appendix 1 on page 11 below***), is "To develop a peer-teaching mentoring program to use within a school during 2021," detailing three stages:

Stage 1: Develop four artifacts for the peer-teaching mentoring program, including:

- A workbook for mentor training and mentee activities.
- Lesson plans for mentor training.
- Lesson plans for mentor/mentee sessions.

Table 1 SMART Goals and Questions

Acronyms	Meaning	Questions
S	Specific	What do we want to accomplish? Who needs to be included? When do we want to do this?
M	Measurable	Is our goal measurable? How can we measure our progress and know we have successfully met our goal?
A	Achievable	Do we have the skills and resources required to achieve my goal?
R	Relevant/Realistic	Why are we setting this goal now?
T	Timely	What is the timeline/deadline? Is it realistic?

As shown in Table 1, the unique acronyms provided relevant questions to help plan each week's activities and goals within the programme.

The SMART goals allowed for the development of the program by responding to the questions in Table 1 to establish clear steps and timelines for the researcher and the school staff involved in the consultations. The SMART criteria were divided into three stages:

(1) Developing the characteristics and pedagogical artifacts

(2) Preparing the program with the school

(3) Developing surveys and interview questions for data collection and future program analysis

The following sections explain each SMART goal and its relationship to the development of the program goals within each of the three stages.

Stage 2: Prepare the program within a school, involving:

- Collaboration and approval from year ten and six coordinators for all four artifacts.
- Approval of room allocation and scheduling by the school.

Stage 3: Prepare surveys and interview questions for program data collection, creating:

- Six surveys (before and after) for mentors, mentees, and parents.
- Interview questions for teachers involved in the program.

The following section describes the SMART goals: S – Specific, M – Measurable, A – Achievable, R – Relevant/Realistic, and T – Timely.

S – Specific

When setting a goal, the program developers need to be specific about completing it. They must consider this as the proclamation of their goal and clearly define it for others to understand (Eby, 2019). It can include information that answers the popular 'w' questions: what, where, why, which, when, and who questions – however, only 'what, who and when' resulted in specific stage goals for this program. The other SMART goal sections address the remaining 'w' questions later. The first question to be addressed was: What do we want to accomplish? The developers needed to think about precisely what needed to be accomplished and include relevant details to address this question. This question is designed to be elaborate to help other readers/participants understand the entire project. Overall, the program developers wanted to construct a peer-teaching mentoring program through collaboration within a school in 2021. Therefore, they needed to break that goal into stages to ensure all program areas were created efficiently in this section.

The second question to be addressed was: Who needs to be included? (Doran, 1981; Eby, 2019). If working alone, this question is easy to respond to. However, when working in a team, those involved must be aware early in the development phase to prepare for their tasks. This program was constructed in consultation with year-level coordinators and other staff at the school, so the program consultation time had to suit their teaching responsibilities. Tasks were divided by 'need to complete' within the deadlines set. Therefore, meetings would regard only those steps that needed to be finalised to avoid disrupting the teacher'' busy schedules' The workbooks were completed, and two meetings were scheduled with the year six and ten coordinators to suggest and make changes and then finalise approval. During the second meeting, there was a discussion about which student's roles and protocols were finalised and what process would be used to complete surveys with parents and their children. The lesson plans were approved via email.

The third question was When do we want to do this? 'When' is more explicit under the 'timely' section of defining SMART goals, but at least a time frame for each stage should be articulated here (Eby, 2019). In stage 1, the two workbooks were developed by the end of January 2021 and approved by the year-level coordinators before the program began in July 2021. The workbooks included activities to develop students' social and problem-solving skills while building their connectedness to school and peers. The lesson plans were constructed by May 2021 for final consultation and approval in early June 2021 so teachers could familiarise themselves before program commencement. Stage 2 was completed at the end of term 2, 2021, including establishing student protocols for participation.

M – Measurable

This program development was spread over several months; therefore, an individual action plan in Table 3 dates each step as a milestone. Milestones make a goal more "tangible because it provides a way to measure progress", and the team members (if any) can understand what is established and when to accomplish it (Eby, 2019). Stage 1 involved completing the workbooks to get approval and feedback by February 2021 for a face-to-face consultation with the staff involved. During this consultation, session activities (length and age-appropriate), the timing of sessions, mentor training topics, and the process of recruiting or nominating students into the program were all discussed. The completed lesson plans were sent to the school for feedback in June 2021, and the consultation with staff was via email only during that month. These lesson plans were vital tools for the peer-teaching mentoring program, with the planning completed for the teacher/s conducting the program. Planning meant the teachers could enter the classroom and teach new concepts to lead meaningful discussions (Milkova, 2021). Stage 2 began in term two, where protocols of students, room and time allocation in the school timetable were established for the program. In stage 3, the 'Before and after program' surveys were constructed before the end of term two. Both qualitative and quantitative data will be collected. Mixed methods research attempts to "fit together the insights provided by qualitative and quantitative research into a workable solution" (Johnson & Onwuegbuzie, 2016, p. 16). However, the teacher

interview questions were finalised near the end of the school year.

A – Achievable

Doran (1981) suggested that A can also mean Assignable, which specifies who will do it. Using the notion of assignable is an excellent alternative to achievable if the SMART chart reflects a team project. Each person could have their specific role in the project elaborated further and what they need to accomplish. However, for this project, the developer drew from Eby (2019), who explains that achieving a goal focuses on its importance and what the user can do to make it work. This can include beliefs, abilities, skills, attitudes, resources and inspire enthusiasm. When developing this section, we considered the question: Do we have the skills and resources required to achieve our goal? Is there some professional development we may need to complete if we do not? For example, the developers needed to create surveys using the SurveyMonkey website, and since their previous experience with this program, it had an upgrade with the integration of Zoom. With COVID-19 restrictions a possibility, Zoom was an excellent interview option (Marhefka et al., 2020). We had not used it before, so the developers needed to practice this integration.

The lead developer is a qualified teacher with the skills to create target age-appropriate activities within the workbooks and lesson plans. They could implement the characteristics within the activities to ensure connectedness: catering to the student's needs, positivity, peer relationships, and social skills (Archard, 2012; Burton, 2012; Carlisle, 2011; Garringer, 2010; Karcher, 2005; Karcher et al., 2002; Quimby & DeSantis, 2006). Also, among their teaching skills, time management, such as prioritising activities and meeting deadlines, and communication, such as speaking in meetings and motivating others, are of high quality. At the same time, their negotiation and critical thinking skills are always "fair, open-minded and independent" (Butterworth & Thwaites, 2013, p. 9). Another skill that was utilised and is of high quality is strategic thinking. Levin (2007, p. 9) believes strategic thinking is thinking about making the "best use of time"" The ability to see what was coming and plan for it to cut the stress was vital to achieving the program on time.

R – Relevant

As with the 'A' goal, 'R' can have two meanings: relevant and realistic; the developers responded to this question: Why are we setting this goal now? This relates to the program's relevance and should focus on something that makes sense with the broader goals (Eby, 2019). For example, the overall SMART goal is to develop and launch a new peer-teaching mentoring program within a school in 2021. According to Edwin Locke in the Podcast, Are you setting practical goals? "Every person's life depends on choosing goals to pursue" (McQuaid, 2019). While mentoring in university became a passion for the lead developer and a life goal to create this program, they also needed to ensure it was relevant to today's needs within a school.

T – Timely

Anyone can set goals, but success is only achieved if the timing of each stage is defined and realistic. The first question to be addressed was: What is the timeline/deadline? In this development phase, each stage has specific dates. This ensures that all steps are conducted and nothing is left out. Locke and Latham (2002, p. 705) define goals as "the object or aim of an action…usually within a specified time limit". Inevitably, at some point, things will not go as planned. By allowing flexibility to adapt, the collaborators could sustain their efforts and carry on reaching their goals in the face of adversity. Once again, including an action plan is pertinent here by outlining the steps for each stage and allowing for any changes needed.

The second question to be addressed was, Is the timeline realistic? Defining what should be achieved halfway through the process can be helpful if the goal will take three months or more to complete. Providing time constraints also creates a sense of urgency. This is what the action plan defines in Table 3. Being realistic about a goal and what can be achieved within a time frame was vital to the program's success. However, trying to complete something too quickly by cutting corners could have been detrimental to the overall peer-teaching mentoring program. Smaller steps must be taken to

achieve the final SMART goal (Day & Tosey, 2011). Hence, this project was divided into three stages, and an action plan was established (Eby, 2019). The time frame (discussed further in the next section) was set over 12 – 13 months and was doable over 8 hours weekly. This time frame gave adequate research, development and consultation time before the program commenced in July 2021.

SMART Goal

A final SMART goal was established after explicitly expanding the goals through the SMART sections. The researchers and collaborators received input from others to ensure they had thought of everything needed to develop the final SMART goal statement (Eby, 2019). While developing this statement – we reviewed what was written throughout each section and constructed the new SMART goal statement. It is not as long as the initial goal and only one sentence is needed. This final SMART goal is to 'develop artifacts and prepare a peer-teaching mentoring program to commence in a school during 2021'. This final SMART goal was the eventual why. The developers would look at this each week to remind themselves what they were trying to achieve.

Table 3 Action Plan

Action Steps for Stage 1	Expected Completion Date	Actual Completion Date
Start and complete the workbook for mentor training and peer-teaching mentee activities	End of January 2021	Middle of January 2021
1st consultation with the school	February 2021	23 February 2021
2nd consultation with school – finalise program and workbooks	April 2021	29 April 2021
Lesson plan development for the mentor training and mentor/mentee sessions	End of May 2021	End of May 2021
3rd consultation with school - lesson plans	June 2021	June 2021
Action Steps for Stage 2	**Expected Completion Date**	**Actual Completion Date**
Time in the school schedule and room allocation for the program to be conducted	Throughout term 2, 2021	End of term 2, 2021
Establish protocols for year ten students as mentor leaders and for year six students as mentees	Throughout term 2, 2021	Week 5, Term Two 2021
Action Steps for Stage 3	**Expected Completion Date**	**Actual Completion Date**
Complete 'before program' surveys	May 2021	May 2021
Complete 'after program' surveys	September 2021	Middle of July 2021
Develop interview questions	September 2021	October 2021

Note. Dates and timelines were adjusted if needed.

Discussion

Numerous The peer-teaching mentoring program was developed to include more authentic and meaningful outcomes for better connectedness to school and peers. Drawing from a social constructivist approach meant that the program development was constructed in consultation with year-level coordinators and other staff at the school. This meant that the researcher and teachers would share knowledge and skills. A skill utilised throughout the program's development was strategic thinking. As suggested by Levin (2007), strategic thinking is making the best use of time to see what is coming and plan for it in the learning environment. Consultations between the researcher, the year ten and six level coordinators and other administrative staff at the school made it easier to see what was coming and plan for it to achieve the project goals on time. This also included the peer-teaching mentoring program's relevance to the cohort of students, the context and learning environments, and the focus on enhancing the program's broader goals (Eby, 2019). Using a social constructivist approach also meant that the program protocols that were consultatively developed would ensure that (1) knowledge would be shared between teachers and students, (2) teachers

and students would share authority, (3) the teacher's role is one of a facilitator and guide, and (4) learning groups will consist of small numbers of heterogeneous students who would share knowledge and skills (Tam, 2000; Vygotsky, 1978). Being realistic about the program's goals and what could be achieved within a time frame was vital to the program's success. This was made possible through periodical consultation with year-level coordinators and other staff at the school and aligning the program goals and expected outcomes to be achieved.

Using the SMART goals to inform the peer-teaching mentoring program's action plan that caters to leadership growth and peer/school connectedness enhanced assignable and achievable roles and protocols that reflect a team project. This meant that each person (the researcher, teachers and administrative staff) had a specific role, tasks, and project goals that were elaborated further to ensure they accomplished them (Doran, 1981). They need to consider this as the proclamation of their goal and clearly define it for others to understand. Tasks were divided within the deadlines on a 'need to complete' basis. The SMART goals ensured that all steps were articulated and attained within a specified time limit, and nothing was left to chance (Locke & Latham, 2002). The steps were broken down to ensure the final SMART goal was achieved (Day & Tosey, 2011). This meant the project was broken into three stages, and an action plan was established for each stage (Eby, 2019). Additionally, consultative meetings would address only those steps that needed to be finalised at the appropriate timelines to avoid disrupting the teachers' busy schedules (Doran, 1981; Eby, 2019). This advanced planning meant the teachers could implement the peer-teaching mentoring program and assign achievable roles and protocols to the students.

Using SMART goals to develop a successful peer-teaching mentoring program to enhance year ten students' leadership growth and year six students' connectedness to their school and peers aided the integration of the four characteristics: (1) promote consistent participation of mentors and mentees; (2) include mentor training and activities that cater to the student's needs; (3) focus on positive interactions; and (4) focus on developing peer relationships and social skills. Collaboration with the school and teachers in developing the workbooks and lesson plans ensured that all four characteristics were reflected upon and included in the program. Every mentor/mentee activity and mentor training session promoted all students' participation, developed social skills, increased positive relationships with peers and teachers, and created better connectedness within the school community.'

There were some challenges within each stage throughout the planning process. Firstly, 'time challenges' arose in stage one concerning developing the workbooks and lesson plans used within the peer-teaching mentoring program. The artifacts for the program were developed in stage one, which included a workbook for the mentors, a workbook for the mentees, and lesson plans for mentor leadership training and mentor/mentee sessions. The workbook artifacts were completed by January 2021, and the collaboration began in February 2021, with the workbooks sent to the school for approval. A second collaboration meeting was scheduled for April 2021, allowing for the time given to the teaching staff involved. This lengthy timeframe could have delayed the program, but this was unavoidable in a school where the teacher's time was poor. The expectation was not to constrain the teachers with a short timeline, as the developers needed a thorough review of the workbooks to deliver an authentic program. In April, the second consultation was to finalise the program details, discuss activities and mentor training and make adjustments based on the teacher's review. The outcome was a forty-minute lesson timeslot, the activities' order was adjusted, and one activity was changed completely. With the finalisation of these workbooks, lesson planning could begin. For example, the lesson plans were completed by May 2021 and sent to the school for consultation by June 2021. The consultation for the lesson plans was via email only. A "well-planned, well-organised and well-presented" lesson plan ensured everyone involved responded with some tips and changes, and they were finalised before the commencement of the program (Wood & Miederhoff, 2010, p. 269).

The second challenge was the development of the semi-structured interviews, which became focus groups because of the teacher's time constraints. For

example, the development of the questions for the semi-structured teacher interviews began in May 2021 and scheduled interviews in November 2021. These qualitative data collection tools allowed for predetermined but open-ended questions to be developed to control the themes discussed (Brinkmann & Kvale, 2014; Given, 2008). The questions/themes were used to evaluate the development of the program. These semi-structured interviews became focus groups to cater to the school's needs and the teacher's time (Brinkmann & Kvale, 2014; Morgan, 1998). The semi-structured interview guide was quickly transferable to a focus group methodology, as the only difference was the number of people interviewed at once (Chrzanowska, 2002). The interview guide included open-ended introductory questions to a theme followed by "probing, follow-up, direct, silence or interpreting questions" to gather more detail or examples of their response (Brinkmann & Kvale, 2014, pp. 135-136).

Despite these minor challenges, the development of the peer-teaching mentoring program was finalised and began in the school on schedule. This development has reinforced the collaboration aims between the program developers, year-level coordinators, and other staff at the school. The developed pedagogical artifacts for the peer-teaching mentoring program reflected the aims to facilitate the sharing of knowledge and skills and implement the characteristics within the activities to ensure connectedness: catering to the student's needs, positivity, peer relationships, and social skills (Archard, 2012; Burton, 2012; Carlisle, 2011; Garringer, 2010; Karcher, 2005; Karcher et al., 2002; Quimby & DeSantis, 2006). This means that connectedness to school and peers could enhance year ten students' leadership growth and year six students' connectedness to their school and peers when they engage with the developed pedagogical artifacts for the peer-teaching mentoring program. Researchers and educators need to understand better the interactions between learners, teachers, and the peer-teaching mentoring program to meet defined educational goals.

Conclusion

In article reported a social constructivist approach that used SMART goals to develop a successful peer-teaching mentoring program to enhance year ten students' leadership growth and year six students' connectedness to their school and peers. The peer-teaching mentoring model used in 2021 began developing from discussions with the school; however, it required a more structured base to ensure developmental completion on time. The SMART chart formula (Specific, Measurable, Achievable, Relevant, Timely) allowed a complete blueprint, so no steps were overlooked, and dates were explicit within an action plan to ensure timely completion. Using the SMART goals aided in the integration of (1) promoting consistent participation of mentors and mentees, (2) including mentor training and activities that cater to the student's needs, (3) focusing on positive interactions, and (4) focusing on developing peer relationships and social skills to increase positive relationships with peers and teachers and create better connectedness within the school community. This gave real-time goals and a sense of achievement, which supported peer-teaching mentoring as a building stone for leadership training and connectedness to school and peers. For future projects of this size and calibre, the SMART chart can allow for a straightforward approach to development.

Disclosure statement

The author(s) declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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***Appendix 1*: Table 2**

Table 2 SMART Goals for Developing a Peer-Teaching Mentoring Program

IG. Initial Goal	Write the stage goals here: 'To develop a peer-teaching mentoring program to use within a school during 2021.' Stage 1: Develop four artifacts for a peer-teaching mentoring program Workbook for mentor training and activities Workbook for mentee activities Lesson plans for the mentor training Lesson plans for mentor/mentee sessions. Stage 2: Prepare the program in a school Assign roles and protocols to the particular cohort of students Assign room allocation and schedule time for the program Stage 3: Prepare surveys and interview questions for program data collection Create before and after program surveys for mentors, mentees, and parents (six total) Create interview questions for teachers involved in the program.
S Specific	What do we want to accomplish? Who needs to be included? When do we want to do this? Stage 1: To develop artifacts The two workbooks and lesson plans need to be developed and approved before the program can commence in July 2021 The workbooks will need to be constructed by the end of January 2021. Consultation 1 – February 2021 Consultation 2 – April 2021 The lesson plans must be finalised in June 2021 so teachers can familiarise themselves before program commencement. Before the final approval of these artifacts, feedback on any recommended changes must be sought from the year ten and six coordinators. Stage 2: To prepare the program in school Assign roles and protocols to the particular cohort of students Assign room and time allocation for the program Stage 3: To develop surveys and interview questions 'Before program' surveys need to be created before the program commences 'After program' surveys need to be created before the end of the program Create interview questions for involved teachers to conduct interviews after the program is complete
M Measurable	Is our goal measurable? How can we measure our progress and know we have successfully met our goal? Stage 1: Upon completing the workbooks, these are sent to the school for feedback in early February 2021. A face-to-face consultation with staff involved in this process will be scheduled for the same month. During this consultation, session activities (length and age-appropriate), the timing of sessions, mentor training topics, and the protocols for student choice will all be discussed. Upon completing the lesson plans, these are sent to the school for feedback in May 2021. The consultation with staff will be via email only in the same month. Once consultation, changes, and approval are finalised for all artifacts, the program will begin in July 2021 (Term 3, 2021). Stage 2: Term 2 – student's roles, year levels, students, room allocation, and scheduled time will be finalised Stage 3: 'Before program' surveys created before June 2021 'After program' surveys created before September 2021 Create interview questions before October 2021
A Achievable	Do we have the skills and resources required to achieve my goal? As teachers, we are familiar with the activities appropriate to the age groups targeted in this program and unit and lesson plan development. The researcher has excellent Microsoft knowledge to develop the artifacts and uses SurveyMonkey to complete all surveys and interviews. The researcher also has excellent time management, communication, negotiation, and critical and strategic thinking skills.

R Relevant	Why are we setting this goal now? A Far North Queensland school highlighted a need to enhance their middle-school students' connectedness to the school and peers as part of their pastoral care program. The school and teachers are passionate about helping younger transitioning high school students build relationships with older peers.
T Timely	What is the timeline/deadline? Is the timeline realistic? <u>Stage 1 and 2</u>: Start Date: October 2020 Finish Date: June 2021 This timeline is realistic for creating, consulting, and changing this peer-teaching mentoring program. <u>Stage 3</u>: Start Date: April 2021 Finish Date: October 2021 This timeline is realistic for creating surveys and interview questions and making necessary changes.
SMART Goal	Review what we have written, and construct a new SMART goal statement. Develop artifacts and prepare a peer-teaching mentoring program to commence in a school in 2021.

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