An inquiry into students' and teachers' perceptions and use of small group work (SGW) teaching and learning experiences within an international school environment

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Abstract

Research into 21st century education has consistently indicated that a key element of preparation for the contemporary workplace is the fostering of skills in collaboration, including the ability to negotiate with others. Furthermore, the advantages for language learners (LLs) in the midst of collaborative small group work (SGW) teams has been demonstrated time and time again in the literature.

The approach undertaken drew on Exploratory Practice (EP), evolving into an inquiry into the perceptions of Diploma Programme (DP) school students and their teachers. Ultimately it provides insights into their views on the implementation of a SGW approach as a means of gaining access to grade level curriculum within a multilingual, International Baccalaureate (IB)-accredited school environment, in Germany, where the core curriculum in delivered in English.

Data was gathered from the students and teachers in this particular context using multiple data-collection tools, including both quantitative surveys and qualitative interviews over a period of ten weeks. The findings suggest that, overall, both teachers and students have a favourable view of a SGW approach. However, a number of implications have also been drawn regarding the polarity of perceptions uncovered in some instances, specifically with regards to the teaching and learning of subject specific language, and the degree of scaffolding that effective use of SGW requires.

The study culminates with several recommendations such as the fostering and maintenance of an institutional climate that celebrates diversity; the on-going professional development for teachers in SGW management techniques and practices; the need for institutional investment in terms of sufficient time and space to implement SGW training, as well as time and purpose-built spaces to deliver SGW more effectively; and finally more active collaboration between teachers and their students, for guiding and informing pedagogical practice, and specifically aimed at enhancing the outcomes for ELLs within similar international school settings.

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Chapter 1 Introduction

1.1 Rationale for the research project

In the researcher's capacity as an English Language Acquisition (ELA) teacher within an International Baccalaureate [IB]-accredited international school, she became interested in following up on the progress of the English language learners (ELLs) that she taught in grade 10, as they transitioned into the Diploma programme (DP), where specialised ELA classes were no longer offered.   Specifically the researcher became concerned about a portion of the ELLs who were exiting ELA classes without having attained the pre-determined English proficiency level set by the ELA department for being mainstreamed, with 'mainstreamed' defined as no longer requiring specialist ELA support.

The English proficiency level set for students to exit ELA classes was based on descriptors developed by the Common European Framework of Reference (CEFR) System. The level nominated was around level B2, which is described as being an 'effective communicator.' This equates to around a 6 using the International English Testing System (more commonly referred to as IELTS).

With regards to these students the researcher felt it was imperative to find ways to ensure that they could more easily access the DP curriculum. In order to clarify which aspects of English language learning and teaching she could focus on, the researcher initially drew upon anecdotal reports received from past and present ELLs, as well as her own observations of the teaching and learning practices she was able to make during the course of her collaborations with colleagues (where the researcher frequently worked in a team-teaching/in-class support capacity). Due to these reflections, and because of her own pedagogical bent towards a communicative approach to teaching and learning, the researcher settled on a focus on small group work (SGW). This is because the researcher had observed the benefits of collaborative group work not only in her own classes, but also in some of the mainstream classes where she provided support for ELLs.

Theoretical support for this belief is found in the seminal work of Vygotsky (cited in Mitchell, Myles & Marsden, 2013) who drew attention to the benefits for language learners (LLs) in fostering their zone of proximal development (ZPD). Neo-Vygotskyians have expanded this original notion, which was initially focussed on the exchanges between an 'expert,' typically a teacher, and a student, to also include group ZPD, such as afforded in SGW settings. In addition, a number of studies of 'in situ' research exists observing the positive impact of SGW on ELLs in school settings (Brock & Raphael, 2005; Ewald, 2004; Gibbons, 2000; Lubben, Sadeck, Scholtz & Braund, 2010). Because language is a major means of accessing the curriculum, there is an interest in this research in noting what opportunities SGW provides for language learning *as well as* accessing the curriculum.

1.2 Purpose of the research project

One of the central aims of this research is to gain a better understanding of the aspects of SGW implementation that are perceived favourably, referred to as 'engaging' or resulting in 'engagement,' with the practice, and those that are not, referred to as 'disengaging' or resulting in 'disengagement' from a SGW approach. These terms are used throughout this report. The researcher notes that whilst there is wealth of information about the impact of SGW within the context of higher education settings (Sugino, 1994; Fung, 2006; Farrah, 2011; Lizzio & Wilson, 2005; Slimani-Rolls, 2003), there is less about international school settings, and, more specifically, an even more limited amount about the perceptions of students and their teachers involved in the DP portion of IB-accredited schools. A notable exception is the report produced by Education Research Centre [ERC] (2013) commissioned by the IB itself, which includes a meta-analysis of over 150 studies into student collaboration. However, the breadth of this report extends from primary school up to the final years of secondary school, referred to as K-12, and therefore is not focussed solely on the DP portion.

A number of researchers, such as Garrett and Shortall; and Johnston, Juhasz, Marken and

Ruiz (cited in Ewald, 2004), have emphasized the value of exploring students' perspectives on learning via a SGW approach. However, according to Ghaith; and Liang and Mohan (cited in Ewald, 2004), the number of studies that focus on learners' awareness of their own behaviours and beliefs with respect to SGW are relatively limited. A further research gap exists in studies investigating the interrelationship between students' and teachers' beliefs (Kiely, cited in Tsui, 2011). This leads to the proposition that more integrated methodologies, such as afforded by an EP-style inquiry, could assist in contributing to understandings of the life within the classroom that students and teachers share (Slimani-Rolls, 2003). Other areas of particular note are limited studies into students' perceptions of the impact of collaborative small-group talk (Lubben, Sadeck, Scholtz & Braund, 2010), as well as ways in which learners can become more self-aware and self-reflective about their approach to managing cognitive conflict during SGW interactions (Zawojewski, Lesh & English, 2003). Finally, Ewald (2004) contends that students' insights could be utilised to inform pedagogy. It is therefore hoped that, in some small way, this study will contribute to, and perhaps inspire, the on-going professional development of teachers in similar contexts, in terms of undertaking to carry out similar inquiries in their own classrooms.

1.3 Context of the study

International schools were initially set up to cater for families of the post-WWII occupation forces, that is British and American citizens who were distributed throughout the world. However, with increasing globalisation, these schools are no longer the monolingual havens they once were, instead they are diverse, multilingual communities. Nevertheless, the dominance of English as the language of instruction persists. The context of this study is no exception, in that it is a medium-sized, English-medium international school located in Germany, with over 67 cultures represented in the student body.

The students that attend this school can be enrolled as early as three years of age, into the

Early Learning Programme (ELP), and stay until graduation from the Diploma Programme (DP) in grade 12, with the approximate age for this being 18 years. In between the ELP and DP courses are the Primary Years Programme (PYP), which caters for 6-10 years olds, and the Middle Years Programme (MYP), which accommodates 11-15 year olds. These four programmes, ELP, PYP, MYP and DP, form what is known as the International Baccalaureate (IB) curriculum. The two year DP programme is an important milestone for students as it signals the culmination of their secondary schooling and, provided they pass, will result in a qualification that is recognised by universities around the world. This is the motivating factor behind many parents' decision to send their children to international schools; so they will receive an internationally recognised qualification at the end.

1.4 Research questions

The central aim of this research is to gain understandings of teachers' and students' perceptions regarding the utilisation of SGW as a means for accessing the DP curriculum within a typical IB-accredited school. The questions guiding this research are:

1. What are students' and teachers' perceptions of SGW learning and teaching as an approach to gaining access to grade level curriculum in a multilingual school environment?

2. What are the current challenges of SGW learning and teaching experiences, for the students and teachers?

3. What strategies can teachers use to design and implement effective SGW learning experiences, specifically for supporting ELLs in accessing the curriculum?

1.5 Structure of the thesis

Chapter two includes a description of how SGW is defined within this report, how the

notion of collaboration fits into 21st century education, a discussion of literature on the theoretical underpinnings of this research and further literature on aspects to do with teaching and learning via a SGW approach deemed most relevant to this study. Chapter three outlines the methodology for the study, including a rationale for the chosen research approach, a description of the participants, an overview of the development process of the data gathering instruments and the implementation process, ethical considerations, how validity and reliability were ensured and an account of the data handling and analysis process. The main findings from the research are presented in Chapter four. Chapter five discusses the findings, particularly in terms of their connections to the existing literature. Chapter six presents a range of implications and recommendations arising out of this study, followed by the limitations of this report. The study finishes with concluding thoughts from the researcher.

Chapter 2 Literature Review

2.1 Introduction

This literature review commences with how small group work (SGW) is defined according to four key terms: *collaborative learning, cooperative learning, problem-based learning* and *syndicate work*. The key aspects of a collaborative-style learning approach, in terms of the affordances, and size of SGW teams round out this portion of the review.

Following this is an overview of literature that indicates the value placed on the notion of collaboration as a whole across the education sector, specifically in terms of its relevancy with regards 21st century teaching and learning. Included is a review of literature that notes the potential enhancement of higher order thinking skills that SGW affords, as well as literature that discusses how the collaborative nature of an EP-style inquiry can contribute to pedagogy. The purpose of this portion of the chapter is to set the focus of this study, that is the implementation of SGW, within an overall framework of teaching and learning practices.

Literature that expands on the theoretical underpinnings selected for this study, namely socio-cultural and socio-constructivist perspectives follow, commencing with the influence of the concept of zone of proximal development (ZPD) on SGW. This is followed by literature drawn from five principle categories that were deemed to have the most relevance to this study, that is the impact of a SGW approach on: language learners (LLs), affective dimensions (from the students' perspectives), cultural dimensions, the age of participants, and issues to do with teacher implementation.

The chapter ends with a summary of key points arising from the literature that would seem to have significant applicability to both the context and participants of this research.

2.2 Defining SGW

The terms *collaborative learning, cooperative learning, problem-based learning* and *syndicate work* have been selected because of the frequency with which they occur in any review of literature into SGW. For the first two terms definitions provided in the report prepared by the Education Research Centre (ERC, 2013), commissioned by the International Baccalaureate (IB), will be utilised. These were deemed to be especially relevant as the context of this research is, as previously mentioned, within an IB-accredited international school.

Smith & McGregor (cited in ERC, 2013, p. 10) define collaborative learning as "an active, constructive process where students work in groups on authentic tasks that require high-order thinking and problem-solving skills." Cooperative learning on the other hand is "the instructional use of small groups through which students work together to maximize their own and other's learning" (Johnson, Johnson & Stanne, cited in ERC, 2013, p. 10).

Therefore, the fundamental difference between these two forms of SGW is that in the former students are engaged in the process of jointly constructing knowledge, whereas in the latter the focus is on transmission of knowledge between students. Whether the learning is 'collaborative' or 'cooperative' impacts on other key features, such as the role of the teacher and the students, as well as the task and group structure; factors which will be picked up in the 'teacher implementation' portion of this chapter (refer section 2.9). However, at times this distinction is not apparent in SGW research, therefore as ERC (2013) points out, because both approaches have "similar strengths, features and applications (…) it would be both tedious and impractical to tease the approaches apart" (p. 11).

In common with collaborative and cooperative learning, problem-based learning and syndicate work are deemed to be more active teaching methods, as compared to say a lecture-style approach, because they also require students to work in small groups, sometimes referred to as 'teams'. The former has been defined as learning where students

are required "to question, to speculate, to generate solutions" (Biggs & Tang 2011, p. 7), whereas the latter is defined as a technique requiring students to work on assignments, on a cooperative basis (Collier, cited in Nordberg, 2006, p. 6). Essentially it could be said that problem-based learning and syndicate work are subsets, respectively, of collaborative and cooperative learning. This is because in the former the focus is more on the *process* that occurs through the interactions, and for the latter it is more on the *outcomes* that result from the interactions.

As noted by ERC (2013) above, irrespective of whether the learning is collaborative or cooperative, there are similarities in the strengths that each affords. For example, according to Johnson and Johnson (1999, p. 18) five outcomes of successful cooperative-style learning include:

- students learn that their success depends upon working together interdependently

- students are individually accountable while achieving group goals

- students support and assist one another's success through face-to-face interactions

- students develop social skills by cooperating and working together effectively

- students as a group have the opportunity to reflect on the effectiveness of working together

Similar positive outcomes are reported by Zawojewski et al., (2003), who found that as a result of implementing a problem-based approach in mathematics classes, the secondary school age participants showed "more interest and motivation (…) greater perseverance [and] higher satisfaction" (p. 343).

Finally, it is relevant to ascertain how many people constitute a SGW team. In this review, attention will generally be on research involving groups, or teams, of between 3-5 members. This is because a review of the literature over recent decades reveals that this is the generally agreed optimal number for SGW-type interactions, as well as the amount most frequently cited (Hare, 1982; Lou, Abrami, Spence, Poulsen, Chambers &

d'Apollonia, 1996; López Hurtado & Viáfara González, 2007).

To sum up, the reader is alerted to the understanding that references to each of these four terms: collaborative learning; cooperative learning; problem-based learning and syndicate work, particularly in direct quotes from the literature, are intended to be interpreted as alluding to SGW-type interactions generally consisting of 3-5 participants.

2.3 Changing educational climate into the 21st century

At the end of the 20th century Tomlinson (1999) noted that whilst in almost every other aspect of life, change had been embraced, "the practice of education remained static" (p. 23). Typically, the teaching and learning in tertiary institutions was found to be done through the implementation of what Collier (1985, p. 3) described as "the five classical methods of shaping students' learning" namely lectures, discussions, practicals, private study and assessment. However, it was believed these methods resulted in a didactic approach to teaching and learning, because of the dominance of direct teacher instruction. As a result, there was found to be undue focus on simply demonstrating knowledge and comprehension, which in terms of Bloom's Taxonomy is levels one and two, and less focus on Bloom's higher-order thinking skills of analysis, synthesis and evaluation (Mackenzie, Eraut, & Jones; Teather & Collingwood; Ellner & Barnes, cited in Collier, 1985, p. 6).

Included amongst a number of alternatives to the classical methods that Collier (1985) reviewed was an approach referred to as syndicate work. His summary of key value-added features that could be facilitated by taking such an approach included:

- the development of higher order thinking skills

- heightened student motivation

- provision for well-grounded discussion

- change of role for the teacher, away from the authoritative

- change of role for the students, away from authority-dependency

- enhanced skill in collaborating with peers on academic tasks including "handling clashes of opinion"

(adapted from Collier, 1985, p.8-11)

A compelling argument for moving towards an equivalent student-centered approach in the 21st century is put forward by Biggs and Tang (2011). They assert that as a result of increased mobility of students globally, the range of "academic diversity" within institutions has broadened (p.13). The impact for educators, according to Biggs and Tang, is that more effort needs to be put into finding ways to engage the type of students that prior to the 21st century would not have felt the pressure to pursue higher education in order to improve their chances in the current, rapidly changing, workforce environment.

Their proposed solution is most clearly represented in Figure 1, where 'nonacademic Robert' is used as a pseudonym for students that previously may have eschewed a university education, and 'academic Susan' is representative of the 'typical' calibre of student entering tertiary institutions prior to increased globalisation. The spaces between Susan and Robert's level of intellectual engagement, labelled 'A' and 'B', represent the fact that even in the midst of passive learning activities, such as a lecture, Susan is utilising more higher order thinking skills than Robert. In other words, Susan is typically taking a deep approach regardless of the teaching method, whereas Robert utilises a surface approach during passive teaching methods, resulting in him "operating below the cognitive level required" (Biggs & Tang, 2011, p. 6) to complete the intended outcomes, as indicated by the lower dotted line. However, when learning activities become more active, Robert is likely to engage in higher level thinking, moving him closer to the cognitive level required, as delineated by the upper dotted line, thus closing the gap between Robert's outcomes and engagement levels and Susan's.

Consequently, Biggs and Tang recommend a teaching approach that moves learners from low level, passive engagement to more active involvement, such as occurs amidst problem-based learning. It is contended that as a result of raising students' engagement via more

active teaching methods, such as problem-based learning, the likelihood of higher order thinking skills becoming activated is increased (Biggs & Tang, 2011, p. 7).
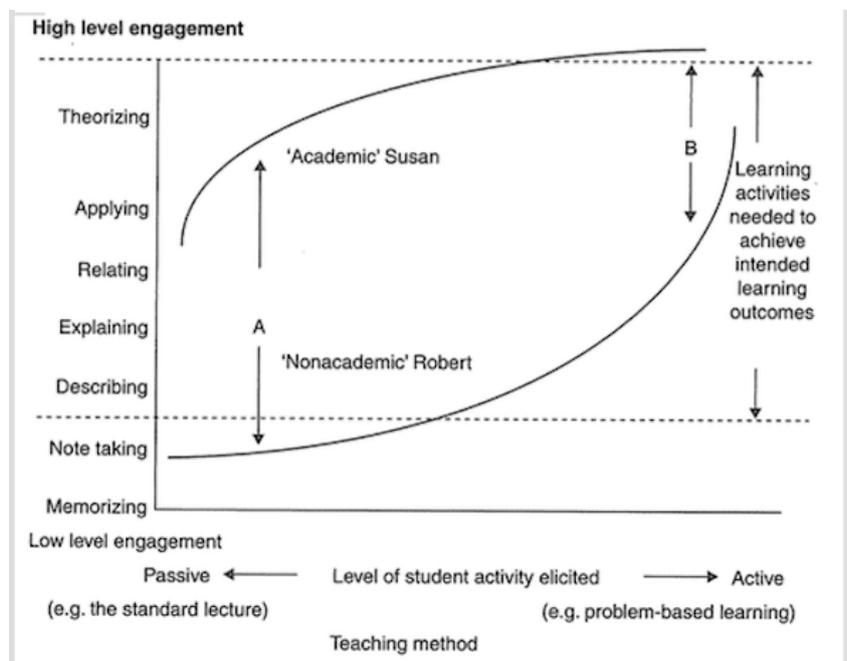
Figure 1 'Student orientation, teaching method and level of engagement' taken from Biggs and Tang

A rather more impassioned description of the merits of moving from a purely transmission approach to teaching and learning to more active student-centered engagement is articulated by John Hattie, during an interview with Montague (2014):

> *A lot of students gain a tremendous amount of their learning from their other students in the class [pause] like as you're learning something and you're starting to get a grasp of something, when your fellow peer, another student, says it correctly, you're more likely to learn it than when another teacher says it or you read it again, but unfortunately a lot of our classrooms, by age eight, if your child hasn't learnt to be passive and listen, they get in trouble. We actually want the opposite, we want them to be active and knowing what to do when they don't know what to do, and that's what great teaching can do*

The literature notes that moves towards a more active, collaborative approach to classroom methodology would also be advantageous. As noted by Kiely (cited in Tsui, 2011), although research into learners' and teachers' beliefs exist, the problem is "these studies have largely been conducted separately, and the interrelationship between learner and teacher beliefs has been under-researched" (p. 34). Tsui (2011) elaborates by observing that the few studies that do exist into both teachers' and students' perceptions show gaps in beliefs, leading Tsui to conclude that the identification of such gaps is only a starting point, and that what is more important is "the impact of such gaps on student learning and how these gaps can be bridged" (p. 34).

As a solution, Slimani-Rolls (2003) advocates for teachers and students to become more active in "contributing to the understanding of the lives they are leading together" via using more integrated methodology such as afforded by an EP approach in their classes. Similarly, Ewald (2004) confirms the value of involving students in the development of educators' understanding, observing that "teachers should be attentive to the opportunities to discuss language learning and classroom-related issues with their students" (p. 175). Ewald concludes with the contention that the outcome of such collaboration will be "[students'] valuable insider perspectives promise to inform pedagogy as well as enrich research findings" (p. 176).

Continuing calls for a reconceptualisation of educational paradigms that make greater use of the vehicle of collaboration are wide sweeping. They stretch across the entire gamut of stakeholders involved in the process of 21st century education; from international governing bodies (Biggs & Tang, 2011; Bentley & Cazaly, 2015), to those charged with national curriculum development (Savage, 2010; Hooley & Moore, 2005), to teachers and students in the classroom (ERC, 2013; Lizzio & Wilson, 2005; Zawojewski et al., 2003, Van den bossche, Gijselaeers, Segers & Kirschner, 2006).

One of the most significant international bodies to call for change came from within the European Union (EU), back in 1999. Through a collaboration of 47 EU nations, what

became known as the Bologna Process was begun to address the lack of academic equity that was identified in tertiary institutions across the region, as it was noted "standards, procedures, staffing, degree structures and academic freedom varied enormously" (Biggs & Tang, 2011, pp. 7). Ultimately what occurred was a strong push towards a more student-centered approach to teaching and learning through recognition that interdisciplinary skills that fostered higher order thinking, including communications skills and teamwork, could improve both the equity and outcomes for students (Biggs & Tang, 2011, pp. 9-13). Similarly, a report conducted by the Organisation for Economic co-operation and Development (OECD) in 2005 across 25 countries also looked at ways to improve academic equity in their region (Bentley & Cazaly, 2015). Findings here led Bentley and Cazaly to conclude that "embracing and harnessing collaboration [between teachers] could create the next wave of big gains in education," as in doing so it could decrease the inequality that exists within school systems and "create better outcomes (…) for every student" (2015, p. 12).

Requests for change to a more collaborative approach in secondary teacher training have also been made. In his book on the value of cross-curricular collaboration in the secondary sector, Savage (2010) asserts "there needs to be a major change in the type of pedagogy that teachers develop for all (…) subjects in the secondary curriculum" (p. 45). Similar conclusions are drawn by Hooley and Moore (2005) in their evaluation of innovative pre-service training for teachers in Australia. They too advocate for a move towards a framework that incorporates greater interdisciplinary learning via increased collaboration between subject teachers. By integrating subjects they contend the focus moves to "broad language development across domains" which, through the process of collaboration, teachers and students alike will be able to "draw upon their combined understandings and culture around the negotiation and pursuit of practical projects of investigation" (Hooley & Moore, 2005, p. 37). Here, the interpretation of "practical projects of investigation" is taken to mean a SGW-type approach.

A further benefit afforded by adopting a more collaborative approach to teaching and

learning is the fostering of vital interpersonal skills. According to a report from the U.S Department of Labor Secretary's Commission on Achieving Necessary Skills [SCANS] (cited in ERC, 2013), the most critical interpersonal competencies for students to acquire in order to achieve success in the 21st century workforce include "the ability to work and negotiate with others" (p. 9).

Lizzio and Wilson (2005) make a relevant point to consider when they state that typically in higher education the type of collaborative tasks that students are engaged in are "semi-autonomous" (p. 374) in nature, with the outcomes, or 'what,' being determined by their supervisors, and the process, or 'how,' determined by the group itself. Therefore, it would seem of practical value for students in the latter part of their secondary schooling to get at least some experience, and support, in how to negotiate with one another in such settings. Similarly, in their study into the value of SGW within the context of secondary maths classes, Zawojewski et al. (2003) maintain that increasing communication opportunities in the processes of collaboration and negotiation are "most like the kinds of problems that students of today will be solving in the workplace of tomorrow."

The manner in which the combined processes of collaboration and negotiation can be operationalised in the classroom is perhaps most usefully described in Van den Bossche et al.'s (2006) model 'Team learning beliefs and behaviours' (see Figure 2). It can be seen that optimal team learning behaviour is deemed to consist of three processes: construction, co-construction and constructive conflict, with the latter being defined as "negotiation of the differences in interpretation among team members by arguments and clarifications" (Van den Bossche et al., 2006, p. 496). This is shaped from the outset by the groups' combined beliefs about factors related to the interpersonal context, namely: the degree of interdependence, both at the task level and between members; social cohesion, described as "the nature and quality of the emotional bonds of friendship" (p. 499); task cohesion, which is the degree of commitment between teams members to achieve the outcome; group potency, defined as the belief the group has in its own effectiveness; and psychological safety, which is how secure members feel about making contributions within the group

context. Van den Bossche et al. (2006) recommend that teachers "pay explicit attention to the basic requirements for fostering interpersonal processes and beliefs that promote learning" (p. 515), and that there be more time allocated for such group development. In this way, they maintain the three central processes of construction, co-construction and constructive conflict will be able to flourish, with the latter creating windows of opportunity for negotiation, ultimately leading to the construction of mutually shared cognition, which can enhance team effectiveness. Van den Bossche et al. (2006) remind that the major requirement for successful outcomes in SGW is not just "putting people with relevant knowledge together" rather it is an understanding of the factors that are required to make collaboration successful (p. 491).
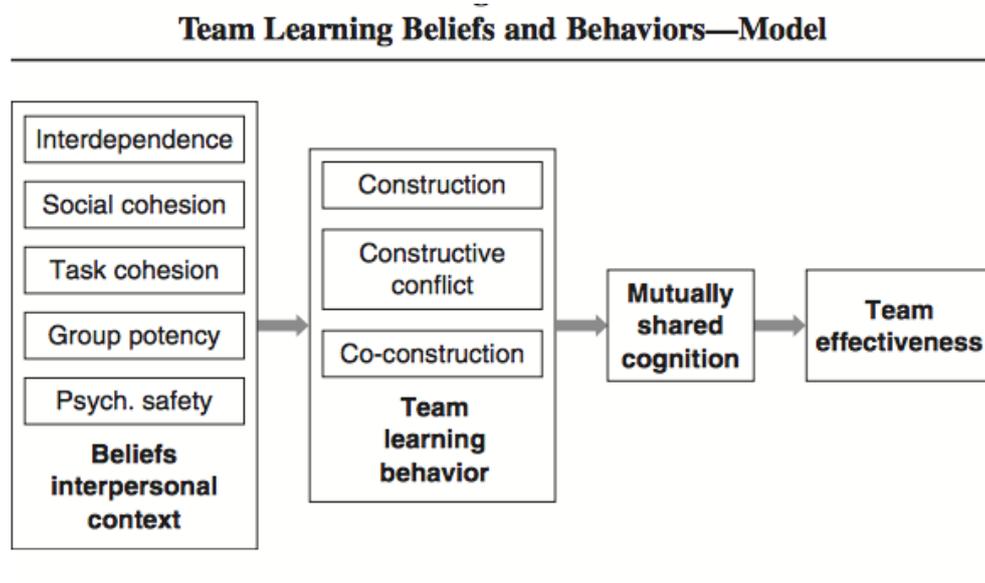
Figure 2 Team learning beliefs and behaviours - model, taken from Van den Bossche et al., (2006, p. 503)

In conclusion, these researchers contend that value will be added to the education sector as a whole by the inclusion of an element of collaboration in one form or another, starting from the level of policy-makers down to what happens directly in the classroom. Moreover, it is believed that the pre-teaching of skills in negotiation will further enhance the outcomes of collaborative learning experiences, as well as equipping students with valuable skills to take into the 21st century workplace.

2.4 Theoretical perspectives of SGW

One of the best known pedagogical paradigms for cooperative learning is the one proposed at the beginning of last century by Vygotsky (cited in Mitchell, Myles & Marsden, 2013), which has at its core a concept he called zone of proximal development, or ZPD. In its original formulation, ZPD was construed to be the interactions facilitated by a more proficient 'expert,' typically a teacher, who extended a 'novice,' or less proficient partner, from where they could work independently, to a more advanced level of shared understanding. Vygotsky referred to this space where support could be extended as being "contingent upon the learner's developmental level" (cited in Swain, Brooks & Tocalli-Beller, 2002, p. 172).

The basis for this concept stemmed from Vygotsky's socio-constructivist underpinnings, which, according to Jaworski (1996) involves two principles, firstly that the learner is actively involved in the construction of knowledge, as opposed to being a passive recipient from the environment; and the "coming to know" results from the learner constantly modifying and adapting their experience of the world (p. 1). Fung (2006) describes the constructivist view rather more simply by defining it as "how knowledge, meaning, and understanding are socially and culturally constructed through social encounters with others" (p. 23).

Socio-culturalists on the other hand, prescribe to a broader view of learning, maintaining that the learning process is shaped because of the social, cultural and historical contexts in which it is occurs. In other words "People learn in relation to what they believe and practice" (Fung, 2006, p. 22). So, while Vygotsky's original formulation of ZPD was primarily concerned with interactions between a student and a teacher, current socio-cultural theorists have expanded the concept to include not only pair work, but group work among peers (Mitchell et al., 2013, p. 241). For example, neo-Vygotskyian researchers, such as Nyikos and Hashimoto (1997) contend that learners' ZPD can be developed

through the construction of shared meaning, as per collaborative learning scenarios, and not just the transmission of knowledge from one to the other, as per cooperative group learning, as suggested in Vygotsky's original model of novice/expert. This has led to reference being made to a 'group ZPD' in SGW literature from a socio-culturalist perspective.

2.5 SGW and language learners (LLs)

A useful paradigm as to why a socio-culturalist perspective could be a valid pedagogical underpinning for utilising a SGW approach in a multilingual classroom is provided by Coyle (2007). Referred to as the 4Cs Framework, Coyle proposes it as a useful starting point in response to the "highly complex and dynamic" linguistic diversity that exists in 21st century classrooms (2007, p. 544). The notion is encapsulated in Figure 3. It can clearly be seen that the 4Cs stand for the interconnected strands of communication, content and cognition, whilst at the centre of all three is the impact of culture, which acts a type of lens, or filter, for the whole. In essence, the 4Cs framework "espouses sociocultural theory where social construction of knowledge and culturally embedded learning permeate the whole" (Coyle, 2007, p. 55).

The aspect of this model that has relevance to SGW implementation is the awareness that one's culture can be both a help and a hindrance to interactions. This is in terms of what LLs know and understand in their L1, as compared to what they know and can articulate in their L2[1]. The challenge, according to Coyle, is that the facilitation of such "interactivity" may necessitate changes in both teachers' and learners' usual toolbox of strategies, including incorporating more focus on "developing skills such as those required for (…) cooperative group work" (2007, pp. 554).

According to Mitchell et al. (2013, p. 221), the potential affordances that a group ZPD

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[1] L1= the initial language learnt, synonymously referred to as 'mother tongue' or 'first language.'

L2 = this term is used to refer to the subsequent language learnt after the initial language.

could generate for LLs within classrooms where a language other than their L1 is the "tool for thought" establishes a valid pedagogical reason for choosing to use a SGW approach. As Alexander (2006) points out "A culture, after all, is mediated by its language; and it is through language, especially spoken language that teachers teach and [students] learn" (p. 1). That being the case, from a socio-cultural point of view, Mitchell et al. (2013) contend that taking a SGW approach enables LLs to have access to "further opportunities to create yet more tools and new ways of meaning, through collaborative L2 activity" (p. 227).
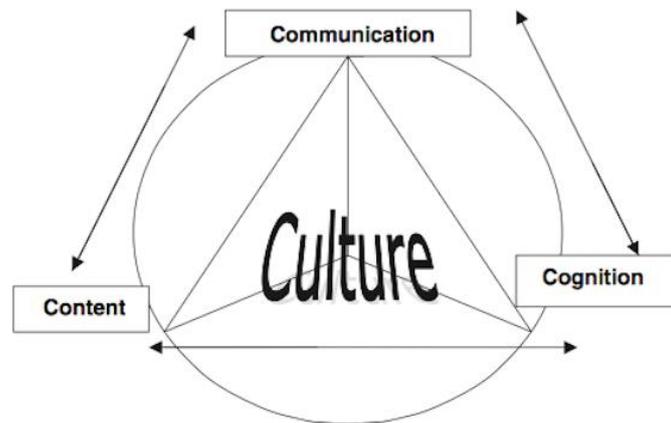
Figure 3 The 4Cs Framework, taken from Coyle (2007, p. 555)

Furthermore, Saville-Troike (2006, p. 18) points out that as a participant in SGW interactions, the L2 learner has "resources of L1 competence, world knowledge and established skills for interaction" that they can contribute to SGW interactions. Zawojewski et al. (2003) concur with this view as they observe groups benefit by having "a diversity of personal cultures and experiences" to draw from (p. 339). Zawojewksi et al., also make a salient point about the role SGW has in helping LLs improve their communication skills, as they note LLs' abilities to provide verbal descriptions often lags behind whatever solution or outcome that is produced. Thus, they believe the public sharing that occurs within SGW "provides students with opportunities to articulate [and] explain their thinking clearly" (Zawojewski et al., 2003, p. 340).

On the other hand, Saville-Troike (2006) points out that while diversity in perspectives, such as in multicultural groupings, can be an asset for SGW interactions, it can also cause "impediments" (p. 18). Lizzio and Wilson (2005) advise that in order to effectively manage the diversity that exists amongst group members, processes that generate "interpersonal trust and acceptance" need to be put in place (p. 375). Furthermore, establishing trust not only enhances the psychological outcomes in the group, but also the educational outcomes as well (Lizzio and Wilson, 2005, p. 375). As elements of diversity are present in all groups, not just those comprising of linguistically diverse members, the remainder of this literature review is presented in general terms, considering the positives that a SGW approach to instruction affords *all* learners, including LLs, as well as potential 'impediments', synonymously referred to as barriers.

2.6 SGW and affective dimensions – students' perceptions

For the purposes of this portion of the chapter, the definition of 'affective' has been limited to mean "the emotions or feelings we have toward *someone* or *something*" (McMillan, 2001, p. 262). Therefore, what follows is a review of studies into which aspects of interactions with others (*someone)* the participants have marked feelings or emotions about, and the possible reasons behind these feelings or emotions, which culminates in creating their overall attitude towards a SGW approach (*something*). The review starts with findings that show positive inclinations towards SGW, most likely leading to engagement with the approach, followed by a review of those that show attitudes of a more negative nature, most likely resulting in disengagement with the approach.

2.6.1 Factors leading to engagement

One reason for improved student involvement, or engagement, with SGW, has been attributed to students' feelings of reduced levels of stress in such contexts. Kendall and Khuon (2005, p. 26) note SGW instruction is beneficial as it creates "a low-anxiety environment." A specific example of feelings of reduced stress is provided by Deng, a

second language learner in a primary school setting, who is the subject of a case study conducted by Brock and Raphael (2005). Deng not only reports feeling more comfortable asking for help and clarification when working within a team of three, but is also able to make "important contributions to the (other) boys' ongoing conversations" (p. 65). Furthermore, Deng's feedback during follow-up reflection sessions reveals the reason why he feels more comfortable in a SGW setting is primarily because he is more familiar with the vocabulary his peers use in the small group, and because he does not feel shy talking with them, which is the opposite of the feelings he reports during whole class discussions (Brock & Raphael, 2005, p. 65). This finding is also borne out by research conducted by Sugino (1994) in a small case study of six Japanese ELLs in a university setting, which leads Sugino to conclude that "the relatively stress-free situations in group work provides students with more opportunity for negotiation of meanings" (p. 104). The value of negotiation, as fertile ground for further learning concurs with previous research presented above (Van den Bossche et al., 2006; Zaworjewski et al., 2003; Hooley and Moore, 2005).

The emotional bond of friendship has also been found to increase the likelihood of engagement with SGW activities, as revealed in Fung's (2006) case studies of three different groups engaged in collaborative writing. For one team, pre-existing familiarity with one another is found to be "a crucial factor for the success of the collaboration" (p. 188). The students report a preference for working together because "the relaxed mood of working together (…) made them think better" (Fung, 2006, p. 188). Farrah (2011), who, like Fung, examines the potential of enhancement of writing skills through collaborative teamwork, finds that the female university participants in her study have more positive perceptions towards SGW. Farrah concludes that this is in line with a significant proportion of research that shows females have "preferences to social activities over males" (p. 147). Farrah (2011) also looks at proficiency levels, year of study and introversion versus extroversion. Her results show that lower proficiency learners, sophomores and extroverts all indicate more positive inclinations towards collaboration on her surveys than their male, higher proficiency, freshmen or more introverted counterparts. Using a means and standards deviation analysis of all her questions, Farrah ascertains this

could be attributed to the perception that collaborative work enhances communication skills, the highest rating item on her survey, followed by elevation of critical thinking skills and motivations. Her findings lead her to conclude that lower proficiency students value the opportunity to share ideas without fear of embarrassment, sophomore students are more practiced at interactions than their freshmen peers, and extroverts have an attitudinal inclination towards collaborative activities (Farrah, 2011, p. 153).

The degree of equity and responsibility that exists within groups has also been shown to have an influence on engagement with SGW activities. Lizzio and Wilson's (2005) research into psychology students' perceptions of process and outcomes within self-managed learning groups in an Australian university reveals that the top three within-group findings are all connected with these two aspects. Specifically their findings uncover that positive perceptions towards SGW-type interactions are enhanced by feelings that every member of the team is being an active contributor, that people take responsibility, and that there is a fair and equitable workload distribution (2005, p. 375).

2.6.2 Factors leading to disengagement

However, not all students in academic settings feel positively inclined towards SGW interactions. In her seminal report, Sorensen (cited in Gunn, 2007) coined the term 'group-hate' which is defined as "the negative attitude that many students have about group work" (p. 67). The four predominant clusters that generate the highest negative attitudes centre around: social dynamics, assessment, outcomes and group organisation. Affective responses leading to social disharmony have also been noted by a number of other researchers (Farrah, 2007; Silmani-Rolls, 2003; Fung, 2006; Brown, 2007; Gunn, 2007; Lizzio & Wilson, 2005; Tomlinson 1999; Blumenfeld, Marx, Soloway & Krajcik, 1996). A review of this research will be included in this portion of the chapter, because of the fit with the *within* group focus. Because of their connections to group work *context*, literature on the remaining three aspects; assessment, outcomes and group organisation, will be reviewed in the 'teacher implementation' portion of this chapter (see section 2.9).

Commencing with the converse findings of Farrah's (2007) research at Hebron University presented above, analysis reveals "statistically significant differences" in males', higher proficiency students', freshmen's and introverts' attitudes towards taking a collaborative approach, with all being more likely to disengage from the practice (p. 155). This is respectively put down to: having more positive inclinations towards competitive-type activities as opposed to collaborative ones; frustration with classmates' ability levels; a lack of experience; and increased inhibition.

In contrast with findings regarding the enhancement value of pre-existing relationships on SGW interactions noted by Fung (2006), Slimani-Rolls (2003) finds the opposite to be the case. Her EP approach into SGW within a modern languages department in a business school in London leads her to conclude previously established relationships among students both inside and outside the class can "interfere heavily with the group dynamic and exert an enormous pressure on its socio-emotional climate" (p. 230) with the result being that expected interactions may be obfuscated entirely. Similarly, as an obverse reflection to their findings noted above, Lizzio and Wilson (2005) find negative feelings about lack of equity in the distribution of workload is the most statistically significant factor leading to disengagement. The degree of diversity and difference that exist within the groups, as well as issues related to cognitive conflict in the collaboration process, are the next most statistically significant factors in Lizzio and Wilson's research, with the total accounting for "over 50% of the total negative feelings reported" (p. 374). The lack of ability to successfully negotiate differences is also one of the main factors that hinder collaboration amongst team members in Fung's (2006) research. Feelings of not being prepared for argument lead to one student disengaging, whilst another prefers to "give in instead of engaging" so as to avoid arguing over different viewpoints (p. 159).

Perceived level of challenge, degree of motivation and certain personality traits have also been found to have a negative impact on learners' affective states during SGW interactions. According to Tomlinson (1999) if a task is perceived as too difficult the learner will feel

threatened, which will result in them not persisting. Conversely if the task is perceived as too easy, this can lead to the learner coasting "into a relaxation mode" (Tomlinson, 1999, p. 33). Similarly, Blumenfeld et al. (1996) maintain it is common for students to engage in a continuum of behaviours with "social loafing" (p. 38) at one end, to those who feel they have been exploited because they are doing the bulk of the work at the other end. Blumenfeld et al., also note the potential negative effects on interpersonal dynamics through more forceful personalities dominating SGW discussions, whilst less confident students may report feelings of exclusion and even ridicule by their team mates (p. 38).

2.7 SGW and cultural dimensions

Participants' culture of origin has also been found to have an impact on SGW interactions, particularly within multilingual contexts. In Brown's (2007) comprehensive work into the fundamental principles of language learning and teaching, he notes the larger the social distance between the L1 and L2 cultures, in terms of cultural perceptions related to either dominance or subordinance, the harder it will be for L2s to integrate within social milieus such as occurs within SGW interactions. Webb's (1982) findings about Asian students bears this out, in terms of their tendency to be more submissive, anxious and less talkative, particularly when put in multicultural groups. Furthermore, research conducted in the Middle East by Gunn (2007) emphasises the need to take into account the difference in attitude that exists in some cultures about the value of coeducational contexts. Although the majority of her participants prefer working in mixed gender groups, she observes that it is important "not to discount the number of students who would rather not" (p. 76). This leads to the conclusion that it is felt "imperative" for teachers to have some awareness of the impact of cultural dimensions on students' affective perceptions towards SGW engagement (p. 68).

2.8 SGW and learner's age

A further dimension that has been found to have an influence on students' attitudes and feelings about SGW interactions, is their age. Brown (2007) believes it is important to

keep in mind that at puberty inhibitions are heightened, and how successful teenagers are in navigating through the communicative process to "bring on affective equilibrium" varies from individual to individual (p. 69). Specifically with regards to teenage LLs, Brown contends it rests on the strength of the language-ego of the individual, in terms of whether they are willing to make a fool of themselves in the "trial-and-error struggle of speaking and understanding a foreign language" when they are interacting within multilingual contexts (p. 70). Similarly, in her blog on teaching English abroad, Moran (2013) points out that all teenagers are "in the middle of figuring out their personal identities" and as a result, the biggest challenge for teachers of this age group is planning activities that engage everyone. Moran also reminds that this is a time when "self consciousness flourishes" so this may present a further barrier to SGW interaction.

Teenagers are not the only age group that may have affective barriers to SGW engagement. Verenikina (2012) reports in her self-study of practices in scaffolding trainee teachers' knowledge of how to implement group work, that young adult trainees directly out of school find it difficult not to be given more direct instruction in her tutorial workshops. This finding leads Verenikina to conclude "While mature age students might appreciate freedom of choice [younger students] might feel unsure how to use such freedom as they are not used to this style of work" (p. 487).

2.9 SGW and issues to do with teacher implementation

Aside from the impact of within group factors, there is a significant amount of literature on issues that variously help and hinder SGW implementation dependent on the group work context. For the purposes of this review two factors have been selected; the influence of teachers' self-perception and pedagogy, and management strategies, of which five have been chosen, namely issues around: intervention and scaffolding; group configuration, including catering for different approaches to learning; the allocation of roles; the purpose and 'fit' of SGW with certain learning outcomes; and the logistical management of time and space.

Previous research conducted within the same context has emphasised the role teachers' belief in their own self-efficacy can have in shaping students' perceptions (Tilton, 2014). Tilton defines teacher self-efficacy as "the perceived capabilities that teachers possess in regards to their presence in the classroom [and] ability to effect change in student learning" (p. 11). According to Ashton, and Henson (cited in Tilton, 2014) it is recognised as "a key factor in influencing student achievement" (p. 11). Consequently, teachers with higher self efficacy are more likely to "examine their own practice and approach to the classroom as a source for change rather than solely placing the responsibility for non-success on the shoulders of the students" (Protheroe, cited in Tilton, 2014, p. 12). Conversely, Tilton notes that "teachers with lower self-efficacy tend to place responsibility for failure on the personal contexts of the students (...) or fixed ability/intelligence" and as such "are more likely to have low expectations of students, coupled with expectation of student failure" (p. 12).

Thus, the role of the teacher in the midst of SGW implementation is clearly influential. Making the transition from a traditional whole-class teaching approach to SGW necessitates what Markee (cited in Lwin, Goh & Doyle, 2012) describes as moving from a "pre-allocated, unequal power speech exchange system to the practices of a relatively locally managed, peer-based speech exchange system" (p. 22). Therefore, a defining characteristic of group/pair work is "that the balance of ownership and control of the work shifts towards the pupils themselves" (Blatchford, Kutnick, Baines and Galton, cited in Lwin et al., 2012, p. 22). Operationally then, classes where SGW activities are being implemented effectively will look and sound quite different from those that utilise more conventional roles for teaching and learning, as there will be less teacher talk, and more student ownership and engagement.

However, it has been noted that some educators find the change of role from teacher-directed activities to that of a "tutor" to be more demanding as there are frequently expressed feeling of "helplessness and lack of academic and social competencies"

(Fransson, Glew & Newhouse, cited in Collier, 1985 p. 11). According to van Lier (2007), this is because there is still a pedagogical mindset that education involves the "transmission of knowledge and information punctuated by periodic high-stakes tests" (p. 61). It can be seen that this view of teaching and learning is in direct contrast to those that are orientated towards a more socio-cultural pedagogy, such as afforded by SGW implementation.

In addition to taking on board a change of role, SGW implementation may necessitate teachers utilising a completely different set of management strategies. Once again this is an aspect that some educators may find challenging. It is maintained that problems with classroom management in the midst of SGW implementation are as a result of a presumption by some teachers that collaboration will happen automatically and indeed "unproblematically when groups are put together" (Slimani-Rolls, 2003, p. 225). Cohen (1994) asserts it should not be assumed that interpersonal skills will be "an automatic consequence of cooperative learning" (p. 7). The solution, according to a number of researchers, is for increased teacher intervention, with Biggs and Tang (2011, p. 165) acknowledging "although the essence of group work is student-student interaction" the role of the teacher is of primary importance, as they need to initiate, orchestrate and manage all the different forms of SGW. According to Reid et al. (2002) this means teachers should be actively involved in correcting, clarifying, redirecting and evaluating "what the students say, do and produce" (p. 98).

Another way of providing support in the midst of SGW interaction is via a mechanism known as scaffolding. Verenikina (2012) defines scaffolding as a management strategy which requires educators to "[tune] into the learners' current level of understanding to then lead them (...) to higher levels of performance and understanding" (p. 48). This can be achieved at both the macro and micro levels through, respectively, "carefully prepared goals, tasks and resources" and via dynamic interactions between the teacher and students throughout the "unfolding of lessons" (p. 48). Van Lier (2007) is also a proponent of macro and micro scaffolding, observing that at the same time as facilitating students' entry

into "challenging facets of project work (…) the learners' initiatives must be noted, encouraged, highlighted and supported" (p. 59). Indeed, by not incorporating timely interventions and scaffolds to guide students' interactions it is alleged there could be "disastrous consequences" (TAMU, 2016).

A review of research into the efficacy of different group configurations as a management strategy for SGW reveals further diverse and at times conflicting perspectives. Furthermore it is clear that there are a number of interdependent factors on which the 'success' or 'failure' of the group rests, including strategies for dealing with group members' feelings, and catering for individuals' different approaches to learning.

On the one hand homogeneous groupings has been found to be most advantageous for mid-achievers (Swing & Peterson; Hooper & Hannafin, cited in Cohen, 1994, pp. 10-11) as well as advanced learners, with the latter group benefitting due to the affordances provided by "a brisk pace, [more] stimulating discourse, raised teacher expectations and enriched material" (Tomlinson, 1999, p. 21). In contrast, homogeneous grouping for lower ability students has not been recommended, as according to Marzano, Pickering and Pollock (2001) it does little to narrow the gap between the "low ability students and the middle and high ability students" (p. 85). This view is supported by Tomlinson (1999) who states that the reason homogeneous grouping of lower proficiency learners goes "awry" (p. 21) is due to a combination of factors including a decline in teacher expectations, over-simplification of materials and general lack of pace.

According to Cohen (1994) a solution is to place students with lower proficiencies in heterogenous ability groupings. Indeed, Reid, Green and English (2002) encourage the use of mixed-ability groupings for LLs in particular, as they believe "those who know more can refine and extend their knowledge by helping others, and those who are less experienced are able in a particular discourse to better acquire a sense of the language and forms of thinking involved" (p. 93). A further variation is proposed by Blumenfeld et al. (1996), who maintain that the ideal combinations for more successful outcomes in

heterogeneous groupings occur when "members are drawn from high and middle, or middle and low achievement levels" (p. 39).

However, Tudge (cited in Cohen, 1994, p. 11) warns that high achievers have been shown to regress in their learning as a result of interacting in such heterogenous groupings. Tomlinson (1999) asserts this is because the more advanced students are requested to do a bigger share of work they have already mastered, in addition to having to "wait (patiently of course)" (p. 22) while their peers catch up, which can result in within group tensions. Likewise, Slimani-Rolls (2003) finds that within the multicultural context of a business school in London, higher proficiency students in the modern languages department also express frustration, due to the perception that their lower ability peers have "nothing of value" to add within SGW settings (p. 228).

A number of strategies to deal with such within group tensions exist in the literature. For example, McMillan (2001) believes the first step is for teachers to identify which of what he terms "tripartite conceptualization" (p. 264) of attitudes is prevailing, that is: feelings, thoughts and/or behaviours. Here it is noted that it could be any combination of the three. As a case in point, McMillan states it is possible to feel negatively towards something according to one element of the tripartite, but have opposing views in another. For example, a student may not like SGW, but may hold the belief that it is valuable. In order to turn this perception around McMillan recommends taking a two-pronged approach by firstly setting targets related to improving student self-efficacy, followed by the value placed on outcomes. In this instance, targets could be students will hold the self-perception that they are capable of learning through SGW interactions, in addition to believing that knowing how to interact within SGW activities is important to know (McMillan, 2001, p. 266). Furthermore, Blumenfeld et al. (1996) contend that giving help to others can in fact benefit the more proficient students, if the students are given training in how to do this, such as "giving examples, creating analogies and using multiple representations" (p. 38). This in turn will go some way towards assisting the students with lower proficiencies, who may not be aware they need help and/or do not know how to seek help.

Alternatively, Tomlinson encourages teachers to look for key moments in group work when a student who is not perceived as 'successful' by peers makes a worthwhile comment or suggestion. By the teacher then articulating this observation to the whole class, or group, learners "begin to see peers in a different light" (Tomlinson, 1999, p. 114), thereby raising their status. Furthermore Tomlinson (1999) reiterates it is imperative that teachers be aware of and sensitive to "students' intellectual strengths and assignment of status" (p. 114) when configuring groups.

In addition to managing students' feelings, a review of literature also uncovers strategies to cater for students' individual approaches to learning in the midst of SGW. For example, Tomlinson (1999) recommends teachers differentiate group work by providing resources that are targeted to accommodate a range of preferences. This is done by providing what Tomlinson refers to as "entry points" (p. 132), of which there are six: narrative; logical-quantitative; foundational; aesthetic; and experiential. By providing a range of options it is contended that the opportunity for 'successful' outcomes will be maximised for all learners. A further strategy is put forward by Johnson and Johnson (1999), who maintain that the first step is to acknowledge the three ways to approach a task, namely: competitively; individualistically; or cooperatively. Johnson and Johnson concede that each has a place "under certain conditions" (p. 2), and that ideally all students be given the opportunity to experience all three by "[learning] how to work cooperatively (…) compete for fun and enjoyment, and work autonomously" (p. 4). However, Johnson and Johnson state that as "social interdependence exists continually" (p. 4) the approach that should be used most frequently is a cooperative-style learning approach. This is because they see cooperation as being "one of the most fundamental and ubiquitous aspects of being human and it affects all aspects of our lives" (p. 4). As a result, Johnson and Johnson (1999) assert that a cooperative learning approach is "by far the most important and powerful way to structure learning situations" (p. 11).

Beliefs in how to manage role assignment is a further area where literature reveals diverse

findings. Reid, Green and English (2002) believe it is essential that role allocation be handed over to students, as they maintain the group needs to take shared ownership of the process. López Hurtado and Viáfara González's (2007) observe that teachers' methods of role assignment includes: random, dependent on the kind of task, previous group arrangements, and heterogeneous ability groupings, whereas students assign roles based on: friendship, popularity, and perception of peers as being responsible. Regardless of who assigns roles Cohen (1994) warns that although perceived as an effective means of promoting both responsibility and engagement with others, if the roles are too distinct, the result may be each person works independently, rather than interactively. As an alternative, Zawojewski et al. (2003) propose that flexibility and fluidity in role-taking assists in successful outcomes.

The degree to which the purpose and desired outcomes of the learning fit with a SGW approach is a further management issue for teachers to take into consideration. Unlike the variability in perceptions regarding group configuration presented above, there appears to be a degree of consensus, with a commonly held view that the type of tasks deemed to be the 'best' fit for a SGW approach are activities which are "difficult for students to accomplish alone" (TAMU, 2016). Cohen (1994) expands on this perception by making the point that tasks which are largely clear cut, with "right answers" are more suitable for individual work, whereas those which are "ill-structured problems" are a better fit for a SGW (p. 4). However, Blumenfeld et al. (1996) warn that tasks which entail more open problem-solving can present the biggest challenges, both for the students and the teachers, as they require the students to be skilled at the process of argumentation, and the teachers at planning, monitoring and evaluating (p. 38).

However, the degree to which a SGW approach fits with assessment tasks reveals rather less accord in the literature. On the one hand Rodger (cited in Collier, 1985) notes, "if students expect to be assessed by an examination which tests mainly memorized subject matter they are unlikely to be willing to invest time or commitment in (...) open explorations" (p. 11) such as afforded by SGW interactions. Conversely, Zawojewski et

al.'s (2003) findings reveal that as a result of being involved in SGW presentations "The listening groups naturally find themselves comparing and contrasting their own model to the model presented, leading potentially to an additional round of revision" (p. 340), thereby enhancing assessment results.

Thus the interpretation here could be that the perceived value of SGW engagement is dependent on whether the outcome is a score assigned on the basis of individual effort, or whether the outcome is achieved through a process of collaborative interaction. Justification for value being placed on the former approach is provided by Farrah (2011) who concludes it is not fair to allocate the same mark "if it is clear that a group member defaulted" (p. 154). On the other hand, Zawojewski et al. (2003) make the point that although following such a process does not "provide definitive windows into individual students' thinking," it is noted that in most workplace environments "the evaluation of the product occurs at the team level" (p. 346). Moreover, whilst the IB (2013) acknowledges that the assigning of a single grade may cause teachers concern due to worries that students are "receiving credit for work produced by other members of the group" they emphasis the notion that "taking collective responsibility is an important idea for students to grasp, and awarding the same mark to all members of a group encourages all students to take responsibility for the performance of the group as a whole" (p. 20). Consequently, there would seem to be value in teachers fostering a sense of collective responsibility ahead of embarking on group assessments tasks, in addition to making students aware of commonplace practices in workplace environments with regards how team processes are assessed.

Finally, a significant portion of research reveals that a paucity of time creates barriers for teachers' successful implementation of a SGW approach. Slimani-Rolls (2003) states for some teachers it is as a result of feeling torn between the demands of "the syllabus [and] students' everyday welfare demands" (p. 234) as well as "various managerial demands" (p. 235), whilst others feel constrained by the length of timetabled lessons (Kutnick et al., 2005). Furthermore, from the learners' perspective, it has been found that students also

feel restricted by time, particularly when required to schedule meetings with their SGW teams outside of regular class times (Farrah, 2011). Moreover, while it may be assumed time could be saved in marking by setting group assessments as opposed to individually, it is noted that the planning as well as follow up meetings with students "to discuss their progress or settle problems" can in fact result in lost time (Texas A & M University [TAMU], 2016). Concerns with time being taken up by classroom management issues is also noted in research undertaken by López Hurtado and Viáfara González (2007), with their teacher participants reporting they frequently have to act as "mediators or conciliators" during SGW activities. Similarly, secondary teachers in Kutnick et al.'s (2005, p. 17) research feel that as a result of too much noise during SGW engagement, students are more likely to go off task, resulting in more time having to be spent on "greater levels of control" in terms of both behavioural and academic aspects.

On the other hand, Zawojewski et al., (2003) maintain that by creating time in the schedule for multiple opportunities to engage in experiential practice the result can be "greater satisfaction with the products produced by small groups of students" (p. 357). Furthermore, they assert having the time to improve SGW processes and outcomes will go some way towards dispensing with the dual misconception that some students and teachers may hold, that is if they (the students) do not know how to approach a task then it is for one of two reasons, namely, "either the teacher posed a poor problem" or that the teacher did not teach them the "right stuff" in previous lessons (p. 357). Ultimately Zawojewski et al., contend through students and teachers being given the time to become more practiced in the art of collaboration, the students will come to the realisation that "together they are quite powerful" and teachers will move from a position of doubting themselves to a position of stability as "routines (…) become established" (2003, 357).

Literature reveals space is another logistical factor that needs careful consideration ahead of SGW implementation. Participants in Kutnick et al.'s (2005, p. 17-18) study report on constraints caused by the size of classrooms and seating arrangements, with furniture being a particular impediment for science teachers who have fixed items such as benches and

sinks. However, one teacher in the study observes that having her own designated classroom is an advantage as she could "choose how the furniture was laid out" (Kutnick et al., 2005, p. 18). Therefore it would seem that having a degree of flexibility in how spaces are configured, specifically in terms of moveable furniture, would assist with the management of SGW.

2.10 Summary

Despite the complex, and at times contrasting findings, this review of literature on the value of SGW suggests the overall potential of such an approach. This is aligned with growing support internationally from a large segment of stakeholders in the education sector who are calling for increased transition to a more active, collaborative, student-centered approach to teaching and learning. In addition, it is evident that the fostering of higher order thinking and the ability to negotiate with peers, such as afforded within the context of SGW interactions, will be valuable assets for young adults as they transition into the 21st century work place. Nevertheless, in order for SGW implementation to be successful it is clear that in addition to sufficient time and space, the role of the teacher is a pivotal one. The review would appear to point towards more emphasis being put into teacher training in order to establish a firm pedagogical underpinning ahead of utilising a SGW approach.

Chapter 3 Methodology

3.1 Introduction

As mentioned previously, this research came about because of concerns about ELLs who had not reached the exit-level proficiency criteria set by the English Language Acquisition (ELA) department by the time they had completed grade 10, which was when specialist ELA support within this context ceased. The decision was made to explore how these students could be supported in gaining access to the international baccalaureate (IB) curriculum once they transitioned into mainstream diploma programme (DP) classes.

The decision to focus on SGW as an approach for supporting ELLs came about as a result of a combination of factors. These included: observations made during the course of the researcher's teaching career; previous studies undertaken; and a personal pedagogical focus of maintaining a communicative teaching style, with the end result being that the approach was one the researcher was familiar and experienced with, and believed had considerable potential for assisting ELLs.

It was felt from the outset that an essential component of the research design would be to involve both sets of stakeholders in the process, hence the research questions sought to gain data from both the students and teachers in the DP sector of the school. Ultimately, the emphasis was on three core aspects related to SGW: perceptions, challenges, and strategies for improvement. This gave rise to three specific research questions:

1. What are students' and teachers' perceptions of SGW learning and teaching as an approach to gaining access to grade level curriculum in a multilingual school environment?

2. What are the current challenges of SGW learning and teaching experiences for the students and teachers?

3. What strategies can teachers use to design and implement effective SGW learning experiences, specifically for supporting ELLs in accessing the curriculum?

This chapter provides an overview of the journey that took place in order to gather data to address these questions. It includes: justification of the research approach taken; a description of the participants and the instruments; ethical considerations, how validity and reliability were addressed; the implementation process; and finally, data handling and analysis. The chapter finishes with a reflection on the data-collecting journey.

3.2 Research approach

When reflecting on what type of methodology to utilise, the researcher had a strong preference for one that invited investigation of the classroom. Upon reviewing Allwright's (2001) comparative flowchart of three processes of teacher development that met this criteria, namely: reflective practice (RP); exploratory practice (EP); and action research (AR) (see Appendix 1), it was found that the defining factor of EP, of not committing the researcher to effect change just for the sake of it, but instead enabling exit after reflecting on any "situational understanding" (p. 116), most compelling. This was because one of the biggest influences on the ultimate shape of the research design, as well as one of the major challenges, was one of time. Midway through commencing this study the researcher relocated back to the southern hemisphere, which resulted in notice being given, effective December 2014. As the school was in the northern hemisphere, this meant leaving halfway through an academic year. As a result, there was a very tight timeframe in which to complete the ethics process and then set about gathering data. That is to say, from when provisional ethical approval was granted in mid-September until the first week in December, this amounted to a total of 11 weeks, one of which was a holiday. By necessity then the parameters were set for a design that was small in scale, but could also generate meaningful data to analyse. As Zheng (2012) notes in his research into SGW, in addition to findings being "local and situational" (p. 124) in nature, it is hoped that this research

also paves the way for others to take a more longitudinal approach in the future in order to gain a deeper understandings which, according to Zheng "[is] exactly what the principles of EP entails" (p. 124).

The proposed research design also seemed to fit with what Allwright (2001) believes is the chief feature distinguishing EP from AR, described thus:

> *deliberate exploitation of standard classroom language learning and teaching activities as the means for collecting data on what happens in the classroom, preferably making at the same time a direct contribution to the learning, and certainly without lessening in any way the value of lessons as language learning lessons. (p. 4)*

At this point it is relevant to note that another element that was influential on the ultimate shape of the study was the desire to keep any impositions on the volunteer classroom teachers' environment to a minimum. This was in terms of task design and with respect to classroom ambience. However, throughout the course of the study all participants were encouraged to use the researcher as a resource person if they had any questions or issues about SGW implementation. The decision to be as unobtrusive as possible came about as a result of reflection on an early attempt at piloting different tools (see section 3.4) which suggested that an outsider's presence might influence results. As a result the researcher decided not to be in situ when the SGW was being implemented.

By adopting an 'in absentia' approach that drew on an Exploratory Practice framework for data gathering, the researcher believed the distinguishing feature of utilising what Allwright (2001) describes as "standard classroom language learning and teaching activities" (p. 4), namely the delivery of the prescribed DP curriculum, but via a SGW approach, would add another dimension to the learning of required subject-specific content, whilst at the same time not reducing the opportunities for any academic language learning to occur. As noted previously (see section 3.1) because specialist ELA support for non-native English speakers ceased in grade 10, the researcher contends that learning the

academic language of the various curriculum areas is a vital component of accessing the curriculum and as such equates with Allwright's (2001) defining feature of EP.

Finally, EP has as one of its core principles the aim of "improving the quality of life" (Allwright 2003, p. 119) for all participants; researchers, teachers and students, through involving all in the research process in equal measure. Furthermore Allwright contends that it facilitates participants generating their own understandings, and not just "consuming them" (2003, p.119). These aspects led the researcher to conclude that EP-style inquiry was a valid and appropriate approach for the research proposal, as by not having to either propose or implement change, as per the standard AR approach, it fitted in with the limited time the researcher had remaining in the context, whilst at the same time allowing for a principled approach to gathering understandings of classroom practice that could, potentially, benefit all participants within the context, in addition to others in similar contexts.

The researcher felt the best way to maximise the richness of what could be achieved, in the time available, would be to take a mixed-method approach to data gathering. A mixed-method approach consists of combining aspects of both qualitative and quantitative data gathering paradigms, both of which have merits, as well as 'gaps' in what they can provide researchers with.

A useful definition of a qualitative paradigm is provided by Parsons [Video file, 2015], who states that this approach is appropriate for "understanding the context and meaning" from participants about what they construe because "they give you an explanation, not just a description." Pierce (2008) describes the strength of a qualitative approach as "its unique capacity, through in-depth interviewing and observation, to learn and understand the underlying values of individuals and groups" (p. 45). In addition, Pierce asserts it enables the researcher to "identify and understand the interpretative lens that subjects adopt, and therefore, the dominant powers and institutions that frame the view and tint the lenses" (p. 45).

On the other hand, a quantitative approach is best suited for contexts where the researcher is interested in achieving a breadth of data analysis via a larger group of participants in order to "crunch for numbers, look for patterns" [Parsons, video file, 2015]. In addition, Pierce (2008) states that, for some, the strength of quantitative instruments is that they result in more "intellectual and operational rigour" as opposed to the "anecdotal (…) exaggerated [and] soft" data some see is the outcome of small-scale qualitative data gathering (p. 46). Pierce contends that researchers are less likely to be "weighed down by bias" as a result of the influence of the choice of issues and concepts being researched when using a qualitative lens (p. 46).

Schutt (2014) provides a useful justification for combining both paradigms, stating that "qualitative data can provide information about the quality of (…) quantitative survey measures, as well as offer some insight into the meaning of particular fixed responses" (p. 348). As a result of reflection on this aspect, a mixed-method approach was duly chosen.

The mixed-method approach designed for this study consisted of four data-gathering instruments, that either directly or indirectly addressed one or other of the three RQs for this study (see Appendix 2):

- a primarily quantitative tool that could give a breadth of data from the context in the form of an anonymous baseline survey, including optional comment boxes; one for gathering data from the Diploma-level students (see Appendix 3), and one for the Diploma-level teachers (see Appendix 4)

- a quantitative instrument for getting a brief snapshot of perceptions about two separate SGW experiences from the students in the form of an anonymously completed exit slip (see Appendix 5)

- reflection surveys on the two episodes of SGW implementation that were primarily qualitative, to be completed by the volunteer teacher participants (see Appendix 6)

- separate semi-structured focus group interviews for the teachers (see

Appendix 7) and students (see Appendix 8) that volunteered to participate in the last phase of the research design.

It was hoped that these latter two instruments would provide opportunities for probing deeper into the 'why' of any trends or patterns that appeared in both the baseline surveys and the exit slips. Pierce (2008) notes that "the use of combined methods can be better accepted as appropriate where one method dominates and the other is used in a secondary, supportive way" (p. 48). Given the predominance of qualitative-type questions in most of these instruments, it was clear from the outset that a qualitative approach would be the dominant method.

3.3 The participants

3.3.1 The teachers

As the impetus behind this study was an interest in uncovering more about the teaching and learning that occurred within the DP sector of the school, this was where participation was sought. Out of a total of 97 teachers in the institution, 48 taught in the secondary sector, and of those, 29 taught DP classes. Being an international school, the staff, like the students, comprised of a mix of nationalities, with the dominant group of UK/US citizens making up 60% of the faculty, followed by the host country nationals, Germans, accounting for approximately 20%. The remaining 20% of the faculty came from 15 different countries of origin.

Ultimately 16 of the 29 DP teachers completed the initial anonymous baseline survey and of those, six volunteered to participate in subsequent phases. Interestingly, the majority of these volunteers, four in total, were from the Science department (comprising of two Biology teachers, one Physics teacher and one Chemistry teacher), with the remaining two from Mathematics and Language A (German) respectively. Only one of the six participants was male, and three out of the six were native German speakers.

3.3.2 The students

In total there were 777 students enrolled at the school ranging in age from 3-18 years during the period of the study. These students were representative of 67 countries, with the largest groups being Americans and host country German citizens, at 17% each. The next most significant groups were from the United Kingdom (9%), followed by Spain and India (4% each). Of the 777 students, 116 were DP students, also referred to as grade 11 and 12. From this group of 116, 64 students ultimately completed the initial baseline survey. Out of this number three subsequently volunteered to participate in the interview phase of the research; all female, and all in grade 12. Two of these students were native English speakers, with the remaining student being a native German speaker.

For ethical reasons, primarily due to the intention to reduce any 'risk of harm,' (see section 3.6) it was felt unnecessary to single ELLs out from their peers. However, because this research was focussed on outcomes for ELLs, students were asked to state which languages they were studying at DP level. The students' baseline survey results revealed that out of the 64 students that completed the survey, just over 53% (32/64) were taking English as their Language A ('first' language) and German as their Language B ('secondary' language). The next largest group were the students who were taking two Language As (just over 21%, or 13/64), with the majority of these students electing the English/German combination. The only other Language As that were recorded on the baseline survey were Spanish (x4), French (x3) and Dutch (x1). Interestingly, three students indicated they were studying three languages, with the combinations being:

> Language A Dutch and Language B English and German
> Language A Spanish and Language B English and German
> Language A Spanish, Language B English, Ab initio German

Although only a very small proportion, the researcher felt this provided sufficient proof of the multilingual diversity that existed within the cohort.

3.4 The instruments – an overview of the development process

The development of the research instruments was a gradual process which involved gathering peer and student feedback, as well as piloting of some of the draft instruments as they evolved. This section offers an account of this process and is followed by discussion of how each instrument was ultimately deployed (see section 3.5) In an effort to further clarify the process the reader is directed to Figure 4, below, where an overview of the span of the research process, from beginning to end, is provided:
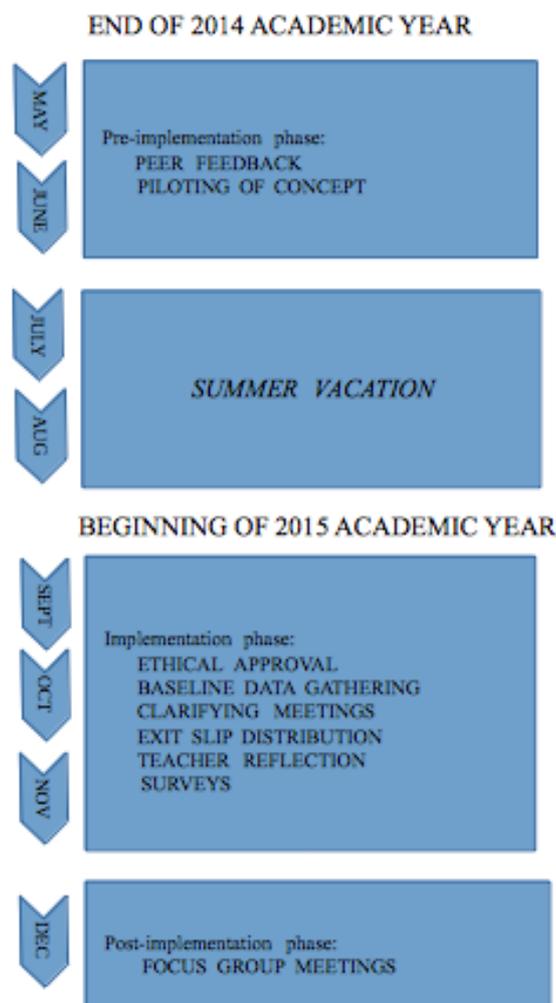
Figure 4 The implementation timeline

3.4.1 Baseline instruments

The initial proposition was to be an observer and record keeper of SGW interactions in classrooms during the implementation of SGW. The thinking was the researcher would gather data to 'see for herself' and then follow up with face to face meetings with any participants who volunteered. The feedback and piloting phase of this original proposition commenced by enlisting the support of a colleague whom the researcher had worked with frequently, in her capacity as an in-class support teacher for the grade 10 ELLs in this teacher's mainstream English class.

While the students in this colleague's class piloted the survey in small groups, the researcher also piloted an observation protocol (see Appendix 9) intended at that time to be part of the data-gathering process. However, it was clear that the presence of the researcher herself was distorting the working of the students in the classroom, and therefore the research design was duly changed so that the researcher would no longer be present during the SGW implementation phase.

The focus of the task that the students were engaged on did however yield valuable insights. As a result, changes were made to the question formats and an online version was substituted for the paper form because of student request. This was then piloted once more with a different colleague and class, and minor details were altered before the final form was implemented. The classes that had participated in the piloting were not included in the final study.

In contrast, the development of the teacher baseline survey did not involve piloting. Instead it grew out of a combination of factors, with the primary influence being the changes that were being made to the students' baseline survey, as well as adherence to gaining information that would address the three research questions.

The thinking behind the type and format of the questions on both the students' and the teachers' baseline surveys was drawn from readings about the typical five point Likert-type scale utilised in questionnaires. According to Dörnyei (2010) the application of such scales has as its main principle a way of getting respondents to record their responses "with the least possible cognitive effort and distraction involved so that the transformation process from their internal rating/response to the marked option in the questionnaire does not cause, or is not subject to, any systematic interference" (p. 32).   In addition, the researcher was cognizant of the observed phenomenon that some participants have of selecting a midpoint when given an odd-numbered scale (Chen Lee & Stevenson, cited in Dörnyei, 2010, p. 28). So, although a few questions incorporated the typical five-point scale as a minimum, the majority of the items allowed participants to select from a menu of 7-11 options. The decision was made to limit the number of options the participants could select for these questions to a maximum of four. This cut-off was selected because, according to Dörnyei (2010) "too many [options] will lead to unreliable responses for many respondents because they won't be able to clearly distinguish different levels of agreement/disagreement" (p. 28). Also, in terms of data handling and analysis, it was felt more logical to restrict the number of choices in order that trends could be more easily identified and/or categorised.

For all items respondents were presented with optional comment boxes inviting them to supply further information about negative and/or positive perceptions of SGW. This was done to provide the potential for further qualitative data to contribute to a richer understanding of the numerical data.

3.4.2 The teacher reflection surveys

The teacher reflection surveys were piloted with one of the colleagues who had piloted the student survey. On his suggestion an online version was utilised. In addition to the mode, feedback was also given about the question types. Of particular note was an aversion the colleague expressed to a request for the teachers to keep a tally of how many episodes of

SGW they implemented over the course of any given week. It was at this point that the decision was made to limit the number of episodes of SGW that data was gathered for, to two. This was also deemed more achievable due to the fact that the time the researcher had remaining in the context was typically a period when class content wound down in the lead up to the Christmas break. Asking for reflections on just two episodes of SGW therefore seemed like the most reasonable and workable option for all, given the parameters.

Further editing of the online version of the teacher reflection survey was done independently by the researcher, that is no further feedback was sought, nor piloting conducted, due to the constraints of time. Changes were made in response to readings on utilising Likert-type scales (Dörnyei, 2010), a desire to align with the three research questions, and with a view to making subsequent data analysis easier. In total five versions of the teacher reflection survey were created, with the final version consisting of ten questions: one identifying question; four multi-choice; and five open questions. As with the student and teacher baseline surveys, all questions included a comment box, as it was felt advantageous to increase the opportunities to gather more 'soft' data if the participants chose to respond in this way.

3.4.3 The student exit slips

The purpose of this data gathering tool was to gain a quick, on-the-spot snapshot of students' perceptions immediately after participating in SGW interactions. The solution was to pose five simple questions with a Likkert-type scale for rating responses. All ratings received on the slip were intended to address RQ1, about perceptions. The questions were inspired by the previously mentioned neo-Vygotskyian interpretation of group ZPD, that is they were attempting to ascertain the perceived degree of academic learning using self and peer assessment (items 2 and 4), whilst at the same time getting an indication of how much the students enjoyed the experience (items 1, 3 and 5). In other words, whether the students felt sufficiently challenged by the activity, as opposed to feeling it was either too simple or too difficult.

The initial research design proposition was that students would be issued a consent form indicating their agreement to complete the exit slips at the completion of each of the two episodes of SGW they were to experience in the volunteer teachers' classrooms. However, because the SGW was going to an integral part of the regular learning experience, due to the fact that the design and shape of the SGW implementation was left in the hands of the participant teachers and not the researcher, this step was omitted. Nevertheless, the purpose and voluntary nature of their involvement was explained to the students by their teachers (see section 3.5), and the filling in of the slips was thereby taken as consent.

A further aspect that was initially considered by the researcher was colour-coding the slips, with the idea being that one colour would be issued to native English speakers and another to ELLs. This idea was contemplated as a solution for making subsequent data analysis easier, and to facilitate more targeted data-gathering of ELLs' perceptions as compared to their native English-speaking peers. However, as previously mentioned, for ethical reasons it was felt unnecessary due to the potential for the ELLs to feel their status within the group was in anyway compromised. Furthermore, by eliminating the need to issue colour-coded slips to specific students, it reduced a further management issue for teachers to have to contend with.

The exit slips were piloted with students from one of the classes that had piloted the survey, with minor changes implemented as a result.

3.4.4 The interview questions

The final instrument to be created was a set of follow-up questions designed at probing more deeply into perceptions received from both sets of participants on all the other instruments up to that point. However, the primary emphasis was to be on gaining more insight into the responses received in the baseline surveys. The reason for deciding to focus on the baseline surveys during the interviews was because, for both the students and

the teachers, this was the instrument that cast the 'widest net' for each group of participants, in terms of coverage. Moreover, the surveys posed the greatest number of questions related to all three RQ's. As such, it was thought to be more relevant to discuss any trends or comments given in the baseline surveys, whilst reminding participants that they keep in mind the responses they had given on either the exit slips (in the case of the students) or in the reflection surveys (to be completed by participant teachers) as a context to draw from, throughout the interviews.

The interview questions were the only other data gathering instrument, aside from the teachers' baseline survey, that was neither piloted, nor shown to anyone else for feedback. This was a deliberate choice as the researcher knew the interviews would be centering around aspects of the respective baseline survey findings, therefore for ethical reasons it was felt vital not to 'share' these results with anyone else, other than the participants who had volunteered to participate in the final phase. Instead the development process of these questions was rather more organic, with the format being tweaked according to data the researcher had gathered from other instruments that had been piloted prior to this phase. Also, it was not known at this point whether participants would opt for individual interviews, or if they would agree to sharing thoughts and opinions within a focus group setting. In other words, there was uncertainty about what shape these meetings would take, until all the volunteers had been liaised with. As with the creation of all the other instruments, the length of time that participants could reasonably be expected to give was a further constraint, which set limits on the number of questions that could be posed. A total of four versions of both the proposed student and teacher interview questions were created.

The only structured question that was pre-determined was the last one where both the students and teachers would be asked if their perceptions about SGW had changed over the period, with an invitation to justify their responses. This was felt relevant to ascertain, given the obvious links to RQ1 (perceptions) and RQ2 (challenges). The researcher decided the only difference between the format of the teacher focus group meetings and the student focus group meetings would be that the teachers would be shown the responses

from the students' baseline survey as well as those of their peers. The students on the other hand would only be shown their peers' responses. The researcher determined it would be relevant for the teachers, as the education providers, to see what the perceptions of the 'consumers' of this teaching approach were, and to discuss further. In addition it was felt this tied in with one of the principle aims of EP previously mentioned; of facilitating participants' generation of their own understandings (Allwright, 2003, p. 119).

3.5 Implementation

The first step in implementing the research design within the context was to get permission to access the institution. This was done via sending a letter to the Board of Trustees (BOT) at the school. Once approval was granted, the researcher then set about the process of informing colleagues. Initially this information came via a third party, the Mother Tongue coordinator at the school, by an announcement at a secondary staff meeting, followed by an email on the school intranet. The Mother Tongue coordinator was selected for two reasons, firstly to lessen the impact of any perceived conflict of interest as per ethical guidelines, and also as a natural choice due to her connection with language learning within the context. This email notified the DP teachers about the intent to conduct research, and included a link to the anonymous baseline survey. Participation in the survey was voluntary, as teachers were requested to complete it in their own free time. Ultimately the Mother Tongue coordinator issued three emails in total, as responses to the survey were slow in coming in. However, the researcher decided to draw a line after the third such reminder, and settle for 16 responses out of a total of 29 diploma teachers.

After viewing these responses on SurveyMonkey, the researcher then took over the role of being primary communicator with participants. Information sheets and consent forms were duly sent to each of the six respondents who had provided their contact details in response to question 8 on the survey, thereby indicating they were willing to participate in subsequent phases of the research. Once these had been sent, the researcher followed up with individual meetings to go over the research design in person. This was felt essential

in order to clarify the process, address any questions, explain the tools and most importantly, ensure that it would indeed be feasible for the teachers to integrate two episodes of SGW into their programmes in the time that remained before the researcher was leaving the context. All teachers were reminded that the researcher was there as resource throughout the process should they require assistance or advice about any aspect of the SGW design they were proposing to implement. These meetings were no more than 15 minutes in duration and were scheduled at a mutually convenient time and place for both parties. They were not for data collection purposes and as such were not recorded. At each of these meetings all six participants agreed that further participation would be feasible, and as a result signed the consent forms.

Once the six participants had agreed to implement two episodes of SGW into their programmes it was necessary to keep a log of interactions in order that the researcher maintained an overview of the scheduling for each participant (see Appendix 10). This was also imperative because it transpired that some of the Diploma students were in different participant teachers' classes, which meant that the researcher had to keep track of rolls in order to advise teachers which students would have already completed the students' baseline survey, which was the next phase of the research.

The timeframes each of the teachers set themselves determined when the students in the class they had nominated would complete the baseline surveys. The researcher provided the teachers with a statement explaining the purpose of the survey, including the fact that responses would be voluntary and anonymous, which they could either chose to read out, or email to their class ahead of time (see Appendix 11). The surveys were completed online during a regular class, under the supervision of that teacher. Four out of the six teacher participants chose to book the Media Centre for this purpose, in line with the feedback from the piloting phase; that students' focus would be greater on the bigger monitors, as opposed to what was afforded by using the laptops from the mobile trolleys.

Out of the 64 students that completed the baseline survey, six indicated interest in

participating in the final interview phase of the research. These students were duly contacted by email and sent the student information and consent form. Confirmation of continued interest in being involved in the study was conducted via email, with the end result that three students were available at a mutually convenient time for a follow up interview. This was scheduled to occur once all the participant teachers had completed two episodes of SGW.

As it turned out, all the participant teachers chose to combine the completion of the students' baseline survey with their first episode of SGW, that is, during a typical 50 minute period. This meant after completion of the surveys each class had approximately 35 minutes left over to engage in a SGW activity. It was up to the teachers to decide whether this first episode of SGW was a one-off experience, part one of two, or part of a series of SGW episodes in their class. The only requirement from the researcher was that data be gathered from two episodes of SGW, per participant, irrespective of whether they were consecutive episodes or not.

At the completion of each of the two episodes of SGW, the teachers issued the students with the exit slips. The implementation process of this phase involved the participant teacher distributing the exit slips in the last few minutes of class, collecting them back in, and passing them back to the researcher, most commonly the same day, by placing them in the researcher's staffroom pigeonhole, via the slot at the top of the lockable door. For her part, the researcher took responsibility for photocopying and delivering these slips, in order that each participant teacher had sufficient copies ahead of their scheduled episodes of SGW, as per the dates recorded on the log of interactions. All the students were required to do was simply circle one option along the continuum presented for each of the five questions.

Once the teachers had completed an episode of SGW in their classes they were sent a reminder email from the researcher with the link to the online reflection surveys. This meant every teacher completed two reflections. The only exception was Anka, who ran

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out of time to complete a further SGW activity in her class.

The next phase in the implementation process entailed the researcher converting the raw data from the exit slips into graphical representations (see Figure 5, below) via the Numbers package process (see section 3.9 for a description of the process).

Participant # 1 SGW #1 29th Oct 2014

Rating (1=none, 5=alot)	Participation of self	academic learning of self	participation of peers	academic learning of peers	personal enjoyment			
1	0	0	0	0	0			
2	0	2	0	0	0			
3	2	5	5	6	2			
4	12	9	8	8	9			
5	7	5	6	3	10			
Varied	0	0	2	4	0			
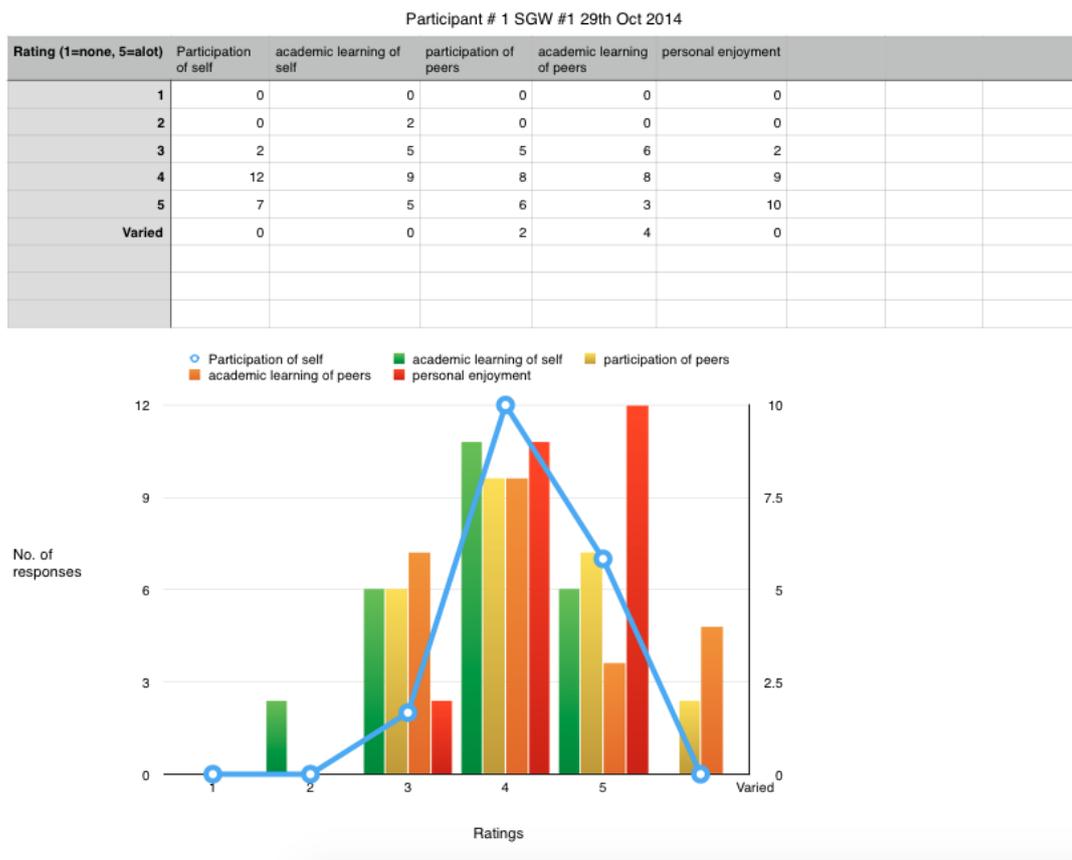
Figure 5 Sample of exit slip feedback

When this was completed the researcher attached the converted versions of the exit slips and sent them back to each of the teacher participants, along with their respective reflections. The purpose of doing this was to give the teacher participants further insights into the perceptions of the students in their classes. It was felt that this data 'belonged' to the teachers, as these were their own reflections, and the exit slip analyses were generated from the anonymous responses their students had supplied. Furthermore, in line with the

EP philosophy of involving all participants, it was felt useful information for the teachers to have ahead of participation in the final interview phase.

The final phase of the implementation process was the scheduling of the interviews. At this point it had been ascertained that all participants were agreeable to participate in focus group meetings with their peers, as opposed to 1:1 meetings. This further reduced the burden on the researcher who was rapidly running out of time to conduct individual interviews. It was agreed that there would be two separate teacher focus groups consisting of three teachers each, and one student focus group, also consisting of three participants . All of these meetings were scheduled over 'working' lunch breaks, where pizza was offered so that the participants didn't have to rush away to eat their own lunches. They were conducted in the researcher's classroom, away from other distractions and in a venue that allowed a degree of privacy i.e not an open plan classroom, nor one with glass doors.

3.6 Ethical considerations

Prior to carrying out the research, approval was gained from the Massey University Human Ethics Committee (MUHEC). Potential participants were provided with an information letter that outlined their rights as participants, including normal procedures to maintain confidentiality, and written consent was provided by all participants, including the governing body of the school, the board of trustees (BOT).

It is noted on the original ethics application that the researcher was going to request access to information about the language profiles of the students in grades 11 and 12, kept on the school database, and overseen by the Admissions Officer. However, as the shape of the research design evolved, this aspect of data gathering was not felt necessary. To reiterate, the researcher did not relate individual participants' responses to ethnicity or cultural background. It was the broader sociocultural context that provided the 'issue' for the investigation.

3.7 Validity and reliability

In order to maintain the validity and reliability of any data collected, the researcher endeavoured to triangulate sources as much as possible. Pierce (2008) defines triangulation as "the means adopted by researchers to secure effective corroboration" (p. 86), by "seeking accounts from three or more perspectives" (p. 90). This was done by way of having more than one instrument to address each of the three research questions (refer previously mentioned Appendix 2).

However, Pierce (2008) also warns that once data is collected it is necessary to interpret it in a manner that weeds out "distortions and untruths" (p. 80), so in order to do triangulation effectively, distinctions should be made between "primary and secondary sources of information [using criteria based on] validity, reliability and accuracy" (p. 80). As a result, the researcher determined that by limiting the focus on gathering rich qualitative data from a smaller subset of the population, as per focus group meetings, a manageable qualitative primary source would be maintained. By combining the 'checking' of the researcher's initial interpretations gained from each of the initial baseline surveys, the anonymous student exit slips, and the teacher reflections with discussions in these follow up face-to-face meetings, the researcher was endeavouring to bolster up triangulation, and thereby the validity and reliability of any findings.

3.8 Data Handling

In order to secure and maintain confidentiality as per the MUHEC guidelines, the following measures were taken when handling the data for this study:

- All data, which included baseline survey results, exit slip summaries, teacher reflections, and transcripts were stored securely on the researcher's personal computer, which has password only access
- The researcher typed up the transcripts from the focus group meetings herself
- All participants who volunteered to participate in the interview phase were assigned an alias known only to the researcher. They were not identified by their real names

in any document or subsequent summary of findings

- The teacher participants did not know which students agreed to participate in follow up, face-to-face interviews

- Any printed material was stored in a secure filing cabinet with the researcher

- Only the researcher and supervisors have access to the data and consent forms, with the only exception being the anonymous exit slip data, and related teacher reflections, copies of which were returned to each teacher (see section 3.5 for the rationale behind this decision)

- Electronic data and paper-based data will be retained for a period of five years.

3.9 Data analysis

3.9.1 Quantitative findings

Numerical data from the student and teacher surveys was generated using the SurveyMonkey platform. SurveyMonkey presents statistical findings in three ways: graphically via bar charts, followed by a table that numerically lists the percentage totals in one column, and raw totals in the next column. An example, from the baseline student survey, is presented below:

Baseline student survey re Small Group Work (SGW) experiences

Q1 Do you like learning in SGW situations?
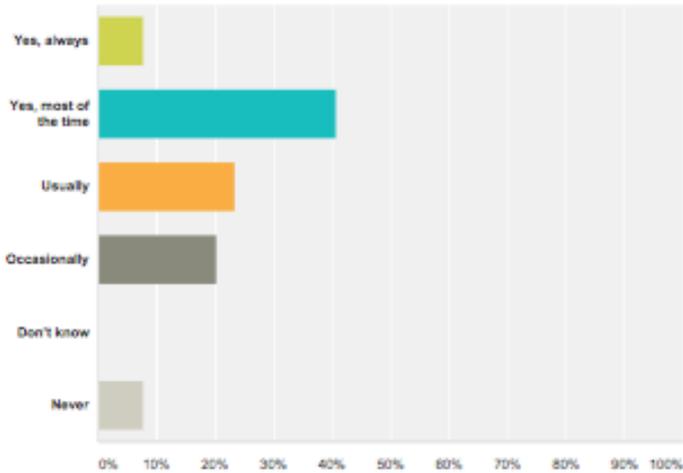
Answered: 64   Skipped: 0

Answer Choices	Responses	
Yes, always	7.81%	5
Yes, most of the time	40.63%	26
Usually	23.44%	15
Occasionally	20.31%	13
Don't know	0.00%	0
Never	7.81%	5
Total		64

Figure 6 Sample findings breakdown from students' baseline survey

By viewing the responses this way, interpretation was relatively straightforward, because 'highs' and 'lows' could easily be seen. It also enabled the researcher to determine which questions garnered more polarising responses, as well as those where there was more of a spread, in terms of the total number of participants that selected each option. Suffice to say, at this point the researcher was beginning to get a sense of emergent themes that would be carried forward into the qualitative analysis, in order to seek corroboration.

As mentioned previously, the student exit slips were not created for online distribution. Instead they were manually handed out to the students by their teachers at the end of each of the two episodes of SGW that each of the participant teachers implemented. Ratings

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students made along the Likkert-style continuum for each of the five questions posed on the hardcopy exit slip were tallied by the researcher, and this raw data was then processed using the Numbers package. This programme was selected because it facilitates manipulation of statistics into a variety of pictorial representations. Ultimately the researcher selected a combination bar and line graph option (as previously shown in Figure 5, above).

Once again, this enabled comparison at a glance in terms of the frequency of ratings for each of the five questions. In addition, because the research design required each class to complete two exit slips, comparison of ratings from one SGW session to the next was able to be made. As a result the researcher was able to identify trends, both within classes and across classes. These perceptions were incorporated into what the researcher came to know and understand about what the qualitative findings revealed.

Finally, portions of the teacher reflection survey that could be tallied numerically, that is responses to questions 2, 3 and 9, were analysed for the purposes of comparison with any equivalent qualitative findings about, respectively: mechanisms used for configuring groups (RQ3); the type of groupings that were used (RQ3); and the perceived 'success' of the outcome (RQ1). The rest of the teacher reflection survey responses contributed to the researcher's understandings of the qualitative portion of the findings, as they were more anecdotal in form.

3.9.2 Qualitative data analysis

As previously discussed, a mixed method approach enables a more in-depth analysis of what lies behind purely numerical findings (Parsons, 2015; Pierce, 2008; Schutt, 2014). It was for this reason the researcher elected to include additional comment boxes under all the survey questions where it was logical to do so. This was in addition to implementing face-to-face meetings, where interactions were recorded and transcribed by the researcher.

Interpreting these written/anecdotal responses was more time consuming, but gave the researcher even greater insights into the statistical interpretations presented above. The approach to analysing the qualitative data was based on coding techniques as described by Saldaña (2013). Starting with the first cycle coding methods, the researcher began with *Initial*, followed by *In Vivo* and then *Versus*. Saldaña (2013), defines the former as "The first major open-ended stage of a grounded theory approach [which] breaks down qualitative data into discrete parts, closely examines them and compares them for similarities and differences" (p. 265). Alternatively, other researchers refer to this as 'open coding,' which Glaser (cited in Ezzy, 2002) provides a useful justification for, namely as a way to "generate an emergent set of categories and their properties" (p. 88). Therefore, at this stage of analysis it was important to keep an open mind and let the findings speak for themselves, as it were.

Ultimately this process produced a list of headings which clusters of data seemed to fit under, resulting in a total of eight labels: logistics; curriculum; social dynamics; learning styles; personality traits; ELLs; teacher strategies; and pedagogical issues. These in turn were grouped under four over-arching thematic categories: temporal (in terms of institutional obligations and constraints); intra/inter-personal; language-related; and pedagogical.

The *In Vivo* coding that followed *Initial* coding is, according to Saldaña (2013), particularly suited for beginning qualitative researchers who are learning how to code, as it honours participants' voices by "the use of words or short phrases from the participant's own language in the data record" (p. 264). During this phase the researcher revisited hardcopy versions of the data, highlighting and underlining words or phrases that seemed to be linked, or 'telling a story' according to the four overarching thematic categories, above.

As a result of this preliminary categorisation of responses, and the situational understandings of the context, the researcher's reflections led her to conclude that a conflict

of sorts existed. Specifically, this was in terms of what was a recommended teaching practice, as compared with the expectations of course coverage within the Diploma programme. This led the researcher to experiment with the third of the first cycle coding methods, *Versus* coding. Wolcott (cited in Saldaña, 2013) defines *Versus* coding as a process that involves moieties "as one of two – and only two – mutually exclusive divisions with a group" (p. 115). By utilising the 'dilemma analysis' approach coined by Winter (cited in Saldaña, 2013, p. 117), the outcome of *Versus* coding resulted in the researcher constructing the following statement:

On the one hand SGW is mandated for in IBO pedagogy, as a desirable practice, on the other hand the application of SGW is constrained by the Diploma curriculum workload demands.

However, both Kendall (cited in Ezzy, 2002) and Ezzy (2002) warn researchers, respectively, against becoming "too wedded too early to what looks obvious" (p. 92) by falling into "predictable traps" (p. 109). Instead Ezzy (2002) recommends that rather than aiming to come to final and objective conclusions, a researcher should endeavour to "engage with the data as 'other,' as a participant in a conversation in which the researcher also participates" (p. 109). Therefore, the researcher continued with a second cycle coding method referred to as *Focused*. *Focused* coding is the phase Saldaña (2013) describes as the search for "the most frequent or significant Initial codes to develop the most salient categories in the data corpus" and is most suited for "the development of major categories or themes from the data" (p. 264). It was as a result of this understanding that the researcher identified two separate, polar opposite perceptions that the majority of findings seemed to be fitting under, which, after a process of trial and error, were eventually coded as 'Engagement' and 'Disengagement'. The operational definition of both of these terms was derived from the researcher's interpretation of the data up until that point. That is to say, if responses seemed to be indicating participants' willingness to participate in SGW, they were classified as evidence of 'engagement,' with evidence of unwillingness to participate as 'disengagement.'

Limiting the coding to just two categories linked with what Ezzy (2002) synonymously terms "selective coding" which is where the researcher identifies the "central story" around which all of their data revolves (p. 92).   However, it was clear that not all the anecdotal comments fitted precisely under one or other of these two headings.   In other words, perceptions were not just 'black' or 'white'.   This led the researcher to add a further two categories for perceptions that were conditional, or 'grey,' namely engagement or disengagement, but with a proviso, or condition, attached.

After separating the coding into this four-tiered continuum of perspectives, from evidence of complete engagement at one end, to complete disengagement at the other end, the researcher then set about re-coding the contributing factors to these perspectives from the *Initial* coding cycle, described above.   What emerged were two dominant clusters, or themes, centered around interactions with others, which were coded as 'social,' and those to do with learning outcomes, which were coded 'academic.' If the social factors appeared to be leading towards engagement with SGW, this was taken to be evidence of 'social harmony'.   Conversely, if the perspective was showing evidence of disengagement then the coding was changed to 'social disharmony.'   Similarly, if participants were more likely to engage or disengage in SGW because of academic outcomes, this was deemed to be evidence of either 'academic harmony' or 'academic disharmony'.

In addition to these two dominant themes, there were a series of other contributing factors that shed further light onto reasons for participants' engagement or disengagement with SGW.   Some of these pieces of evidence were only gleaned from one participant, however they were nonetheless valid to consider, and as such are included in the Findings chapter.

3.10 Reflecting on the journey

As stated in the introduction to this chapter, one of the most appealing aspects of taking an approach that drew on Exploratory Practice from the researcher's perspective was the

potential affordance of improving the quality of life for all participants, by involving them in equal measure. Upon reflection, the researcher is less than convinced that this occurred, particularly as a result of the constraint imposed by the limited window of time that loomed large throughout the entire data gathering process. This data gathering would not have been possible if it weren't for the generous contributions of time and energy that the piloting and participating teachers gave to this project, and for that the researcher is enormously grateful. In addition to making accommodations to their programmes, they also variously gave up lunch times and non-contact times allowing the researcher to either gain feedback, or provide further clarification about the research design. Similarly, the input from the three grade 12 students who participated in the focus group meeting was of enormous value. Their insights added essential understandings to the data gathered from their peers on the exit slips and the baseline survey. Ultimately, it is hoped that the conclusions drawn from a synthesis of all these contributions will in some small measure play a part in improving the quality of life for stakeholders in similar contexts.

Chapter 4 Findings

4.1 Introduction

As a result of using a mixed method approach for data gathering, the findings are separated into two clusters, quantitative findings followed by qualitative findings. The quantitative segment is presented first in order to provide an overview of general findings, in terms of the relative proportions of responses. These findings are drawn from the numerical components of the students' data collection tools, comprising of the initial baseline survey (Appendix 3) and exit slips (Appendix 5) followed by the statistical portion of findings drawn from the baseline survey and reflections completed by the teacher participants (refer Appendices 4 and 6). The highs and lows in each section are commented on, plus any outlier statistical findings deemed interesting or unexpected. The reader is reminded that since this is not a fully quantitative study, the approach that has been selected is a descriptive analysis of findings, as opposed to a comprehensive statistical analysis.

Interpretation of the quantitative data reveals findings which raise certain questions, so the qualitative phase is presented next in an effort to provide clarification. To enhance triangulation a description of any pertinent trends indicated in the quantitative findings is interwoven where relevant. The qualitative findings are gleaned from the comment boxes in each of the students' and teachers' baseline surveys, teacher reflections, and from the transcripts of each of the focus groups. These findings are written as a narrative along a continuum, that begins and ends with the two polar opposite groups of predispositions, namely engagement and disengagement (terms previously defined in section 3.9.2) that emerged as a result of the coding process described in the Methodology Chapter. In total there are four clusters of findings along the continuum:

- total engagement
- engagement with conditions, or provisos, attached
- disengagement when certain conditions are present, or with certain provisos

attached

- clear cut disengagement due to specific factors or conditions

Furthermore, within these four overarching predispositions, responses are presented under the two predominant subcategories that were uncovered in the coding process, namely, perceptions about within-group dynamics, or social outcomes, followed by those to do with group context, primarily related to academic outcomes.   In addition, there are a number of other factors that either the students and/or the teacher participants commented on, including: preferred approach to learning; logistical factors; teacher management issues; and task fit.

The chapter finishes with conclusions about the two sets of participants' perspectives drawn from summaries of the findings presented at the end of each segment.   An interpretations of the students' perspectives is presented first, followed by those of their teachers'.

4.2 Quantitative findings

What follows is the researcher's interpretation of the results of all of the numerical data, starting with students' perceptions gathered from the initial baseline survey, followed by the exit slips.

4.2.1 Students' perceptions

The findings in Figure 7 are gleaned from a total of 64 Diploma level students, that is, students in years 11 and 12, aged 16 years and over. The most commonly chosen response for question 1: *'Do you like learning in SGW situations?'* is that students like learning in SGW situations most of the time (40.63%, or 26/64 students).   Interestingly for this question, perceptions at either end of the spectrum are identical, that is, 7.81% or 5/64 students, either *'always'* like learning in SGW situations, with the same proportion *'never'*

liking it. By combining scores for *'always,'* *'most'* and *'usually'*, a percentage of 71.88% (46/64 students) is achieved, which indicates a favorable perception towards SGW by the majority of students.
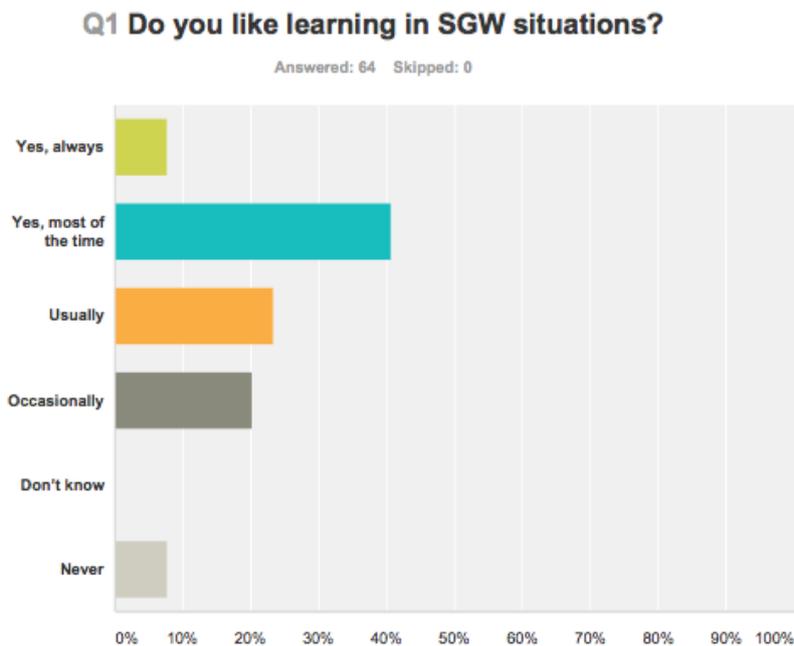
Figure 7 Question 1 Students' baseline survey

The second question in the student survey (see Figure 8) seeks to uncover the factors that have the biggest influence on how they feel about participating in SGW activities. The most commonly chosen response by far is *'Who is in my group,'* with 87.50%, or 56/64 students selecting this option. The next most commonly chosen response is *'The task we are required to do,'* at 64.06%, or 41/64 students. Therefore, the conclusion is that the social dynamics that exist within a group has the biggest impact on how students feel about participating in SGW learning activities, followed by the nature of the task.
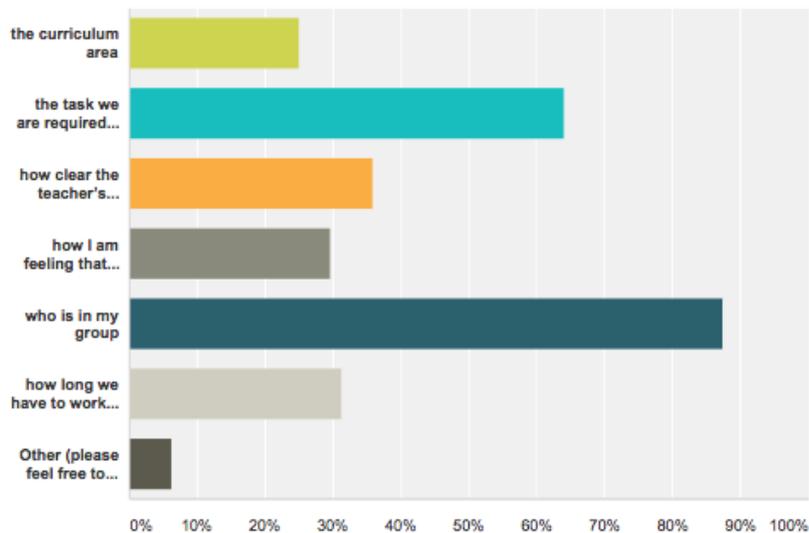
Figure 8 Question 2 Students' baseline survey

The responses to question three (see Figure 9) are less dramatic in terms of the range of difference between options. The most commonly selected option in response to whether SGW is deemed as more effective than working independently is *'I think SGW helps me learn course content sometimes,'* chosen by 43.75%, or 28/64 students. The next most chosen option is *'I am unsure if SGW helps me learn course content'* (23.44% or 15/64) students. This time responses at either end of the spectrum are skewed more towards positive perceptions, with 17.19% or 11/64 students selecting *'I know SGW helps me learn course content'* as compared with only 3.13%, or 2/64, holding the perception *'SGW never helps me learn course content.'* Overall, taking the percentage of students who feel it assists their learning *'sometimes'* and combining it with those that *'know'* it assists their learning, the result is over half (60.94% or 39/64) of the students seem to have favorable perceptions towards a SGW approach as a vehicle for learning, at least for some of the time.
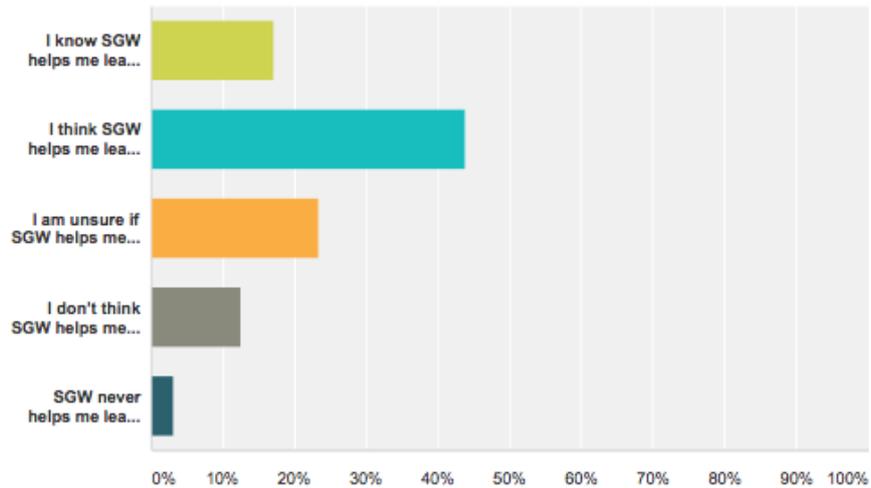
Figure 9 Question 3 Students' baseline survey

In terms of the degree to which SGW engagement is perceived to assist with the specific outcome of academic language learning (refer Figure 10) results are lower, with under 50% of the students feeling this is the case. This percentage is drawn from the number of students who chose *'SGW helps me learn academic language sometimes'* (36.51%, or 23/63) and those who chose *'SGW helps me learn academic language'* (9.52%, or 6/63), making a total of 46.03%, or 29/63 students. In addition, the number of students who have completely negative perceptions about this aspect of learning being assisted by taking a SGW approach, is over double that of the previous question, with 9.52%, or 6/63 selecting *'SGW never helps me learn academic language.'* This would seem to indicate that whilst the same group of students have favorable perceptions about a SGW approach helping their learning of content, there is not the equivalent level of belief about value being added to the specific component of academic language learning as a result of such interactions.

Q4 Do you think SGW learning experiences help you learn the academic language required for all your subjects?

Answered: 63   Skipped: 1

SGW helps me learn academ...

SGW helps me learn academ...

I am unsure if SGW helps me...

I don't think SGW helps me...

SGW never helps me lea...

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
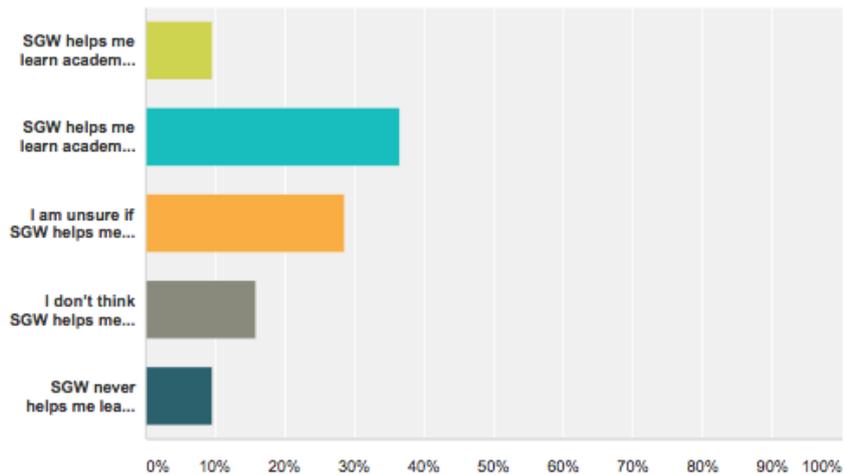
Figure 10 Question 4 Students' baseline survey

The next question (see Figure 11) seeks to undercover perceptions about the value of taking a SGW approach when summative assessment scores are at stake. Based purely on these numerical results it is clear that there is less positivity than for the previous questions, as when the proportion who chose *'don't think'* and *'never'* are combined, the percentage rises to just over 30% (or 19/63 students), compared with only 11.11% (or 7/63) believing that SGW *'helps'* them get higher summative grade. In addition, there is a not insignificant proportion of students that indicate they are *'unsure'* (28.57%, or 18/63). Therefore, these results show more uncertainty about the merits of a SGW approach where summative grading is concerned.
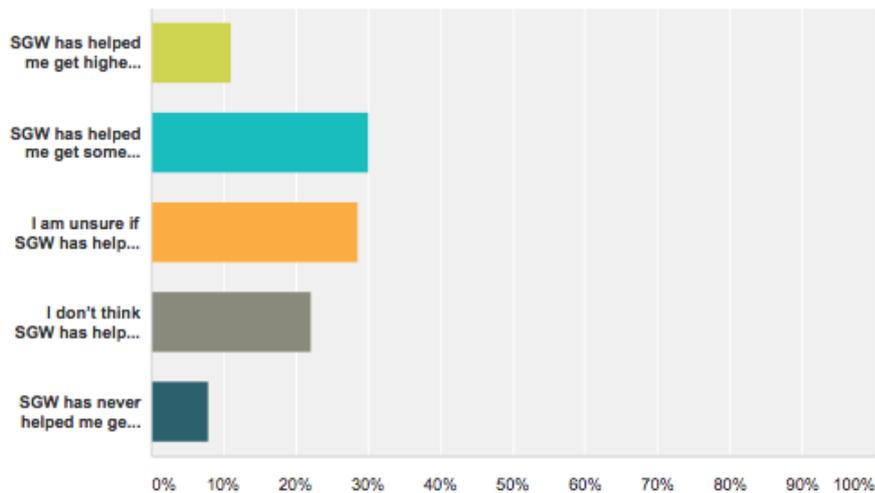
Figure 11 Question 5 Students' baseline survey

When it comes to perceptions about which approach would be best for determining group membership (see Figure 12), students show a slightly higher preference for deciding who should be in their group themselves, with 31.75% or 20/63 selecting *'I think it is better when students decide who they work with,'* as compared with 22.22%, or 14/63 selecting teachers should decide. The next highest score for this question is *'I am unsure what is better'* at 17.46%, or 11/63 students. Therefore, it seems perceptions about this facet of SGW management are less clear cut.
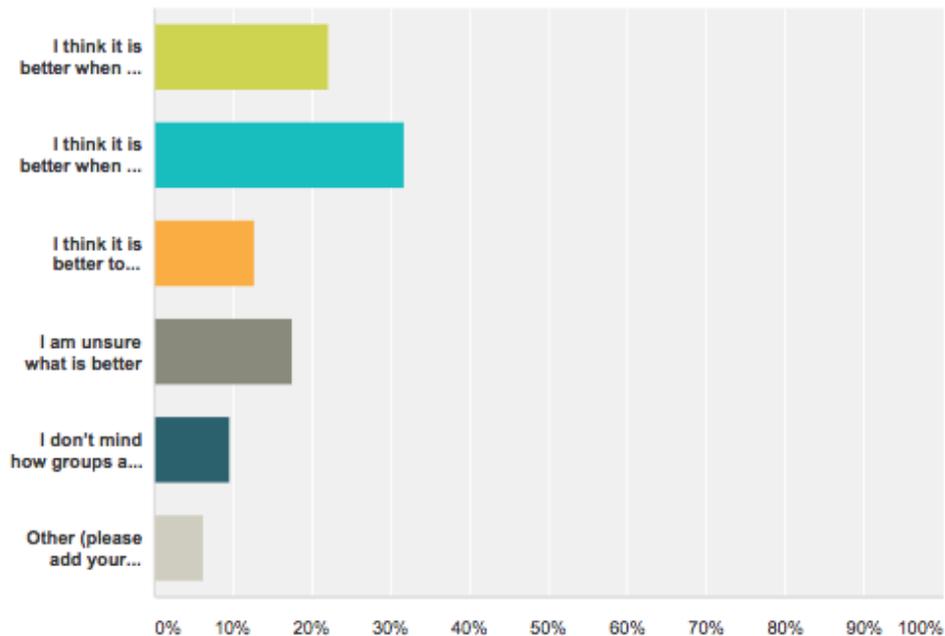
Figure 12 Question 6 Students' baseline survey

Question 7 asks for feedback about additional strategies teachers could employ, with the students invited to select up to a maximum of four options, out of a total of ten (see Figure 13). In this case three strategies are selected by more than 50% of participants, namely *'Supplying each small group with a checklist/written instructions'* (60.94%, or 39/64), *'Checking in to make sure everyone understands the task before beginning the SGW'* (54.69%, or 35/64), and *'Giving everyone in the small group a specific role'* (51.56% or 33/64). The commonality between all three of these strategies would seem to be revealing perceptions about value being placed on direct teacher intervention ahead of commencing SGW. The next tier of preferred strategies, selected by between just under half to one quarter of the students are, in descending order, *'Allowing small groups to work in other spaces (e.g outside of the classroom)'* (45.31% or 29/64), *'Letting everyone make their own notes before joining a small group'* (31.25%, or 20/64), followed by *'Setting time limits'* and *'Providing each small group with keywords/phrases'* (25% or 16/64 each).

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Q7 Which of the following strategies do you think TEACHERS could use to make SGW activities more effective learning experiences? (please choose up to a maximum of four, that is, feel free to choose between 0-4 responses from those listed below):

Answered: 64   Skipped: 0
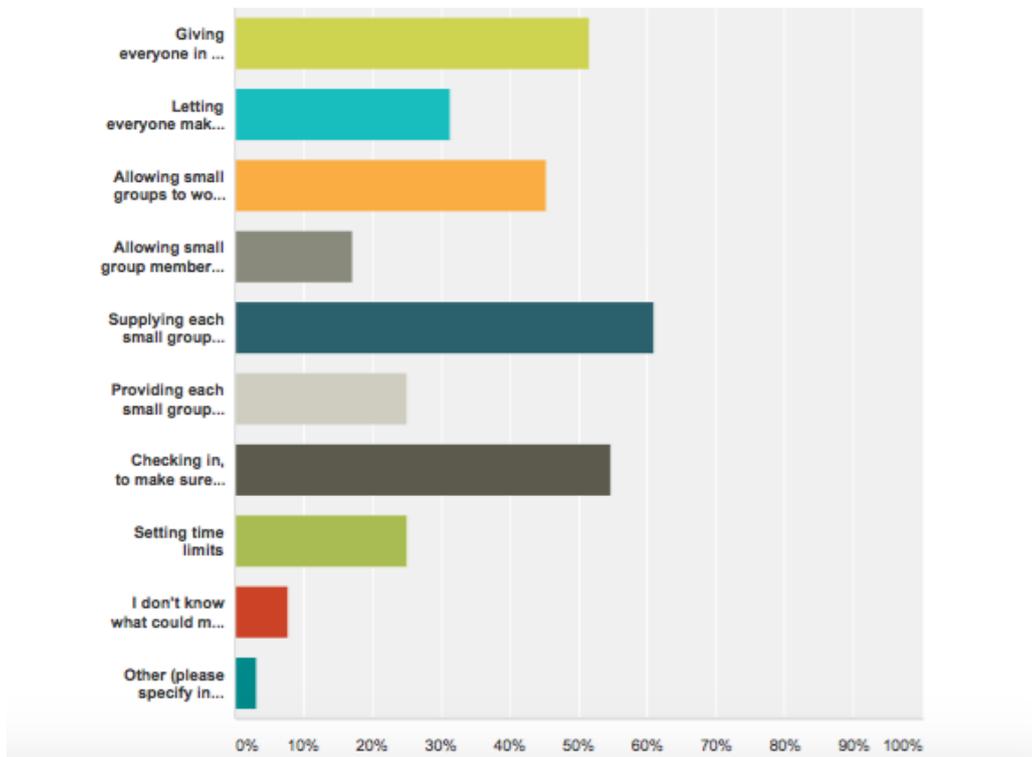
Figure 13 Question 7 Students' baseline survey

When the students are asked what they themselves can do in terms of making SGW a more effective learning experience (Figure 14) a total of four strategies out of eleven poll higher than 50%. In descending order they are *'Everyone doing an equal share of the work'* (67.74%, or 42/62) and *'Helping each other'* (58.06%, or 36/62), with *'Making sure everyone in the small group has a specific role'* and *'Respecting each other's opinion'* equal at 53.23% or 33/62 each. The commonality between all four of these items would seem to be pointing towards the potential value that would be placed on mechanisms to establish equity and develop collaboration skills ahead of SGW interactions with their peers.

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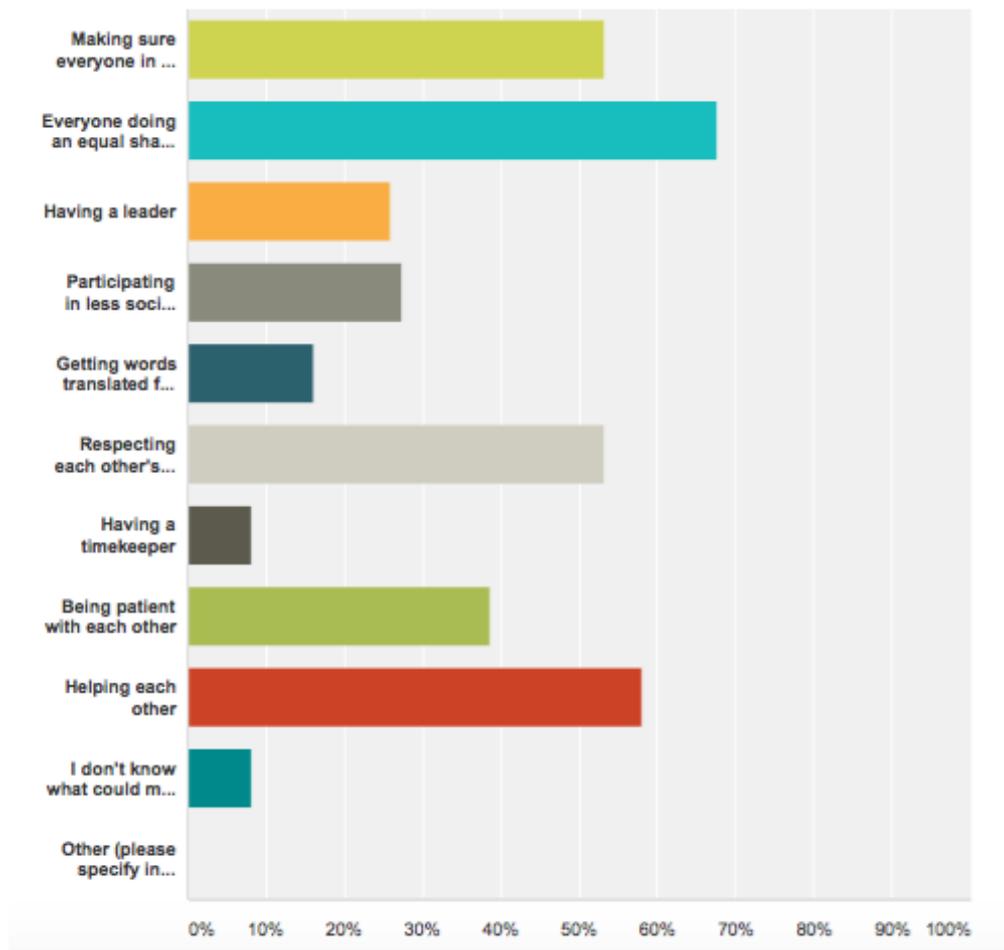
Figure 14 Question 8 Students' baseline survey

The final question in the student survey where there is a numerical component is asked in order to gain some sense of the level of language proficiency of the group, specifically, whether students are studying two Language As at Diploma level (the highest level of proficiency), or a Language A and a Language B (see Figure 15). Although not asked directly, for ethical reasons, and to retain anonymity, it is felt relevant to ascertain

language proficiency, given the multilingual context of the setting. Results show that the majority of students who chose to complete this question in the survey were taking English as their Language A and German as their Language B (53.33%, or 32/60). The next most significant group was two Language As (21.67% or 13/60 students), with most of these also being the English/German combination. The only other Language As mentioned were Spanish (4/60) and French (3/60). These results are noteworthy because they would seem not to be representative of the diversity of language origins represented in the student body as a whole (over 60 different cultures), as outlined in the introduction. As a result this is a factor that will be included in the Discussion chapter.

Q11 Please could you indicate what languages you are studying, from the choices below, for example: Lang A = Spanish and Lang B = English

Answered: 60   Skipped: 4
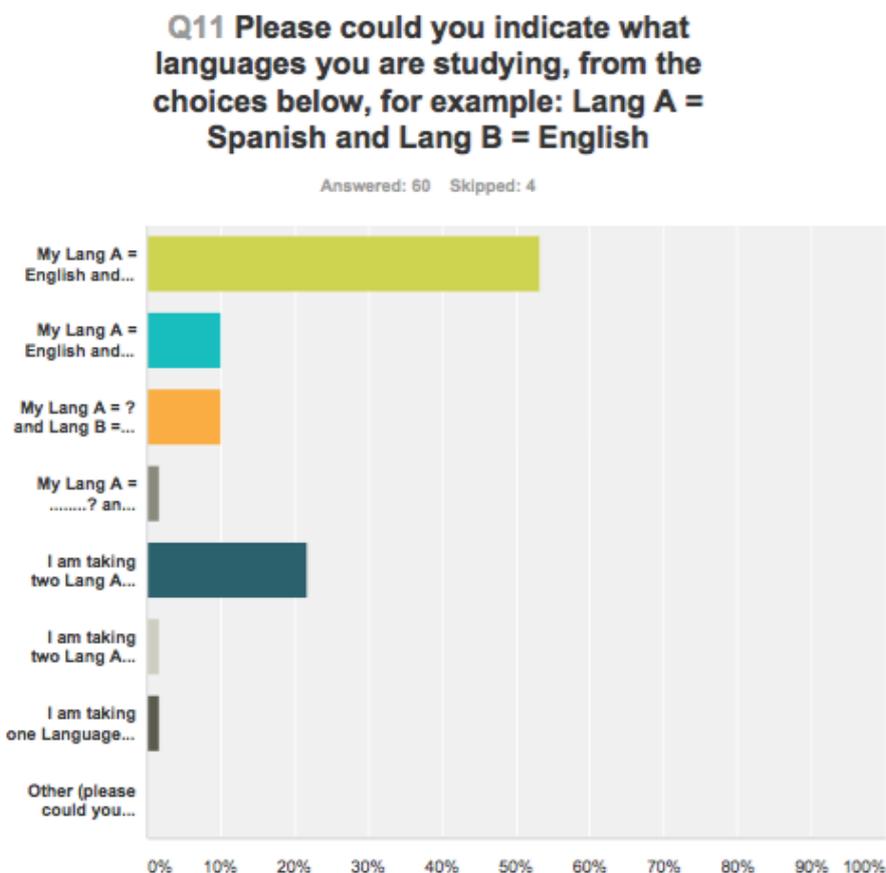
Figure 15 Question 11 Students' baseline survey

The statistical findings generated from the student exit slips are less clear cut due to the fact that there was insufficient continuity in terms of student attendance from one session to the next. However, based on Petra and Mary's classes (the only teachers who had an

identical number of students present for each of the two episodes of SGW they implemented in their respective classes) the sole item on the slip that showed any increase in ratings over the two sessions was in response to the fourth question: '*How do you rate your peers' academic learning in today's SGW learning experience?'* Petra's class showed the most significant increase, with the number of students choosing a 5 out of 5 rating for peers' academic learning increasing from 3/21 to 6/21 from one session to the next. Students in Mary's class had a less marked increase, moving up only one point, from 6/13 to 7/13 selecting 4 out of 5.

In contrast, in Louise's class, the students' self assessment of their own academic learning was the only item to show an increase, albeit it proportional, from 6/17 (or approximately 35%) giving this item a 5 out of 5 rating in the first episode, to 8/11 (or approximately 72%) choosing 5 out of 5 for the second episode of SGW.

Another finding worth noting is that in response to question 5 '*How do you rate your enjoyment of today's SGW learning experience?'* out of the 85 exit slips that were completed for 11 episodes of SGW only four students selected a ranking of 1 *(= 'none'),* with a further eight selecting 2 *(= 'very little').* The rest of the responses selected were either 3, 4 or 5 *(='some', 'quite a lot'* and *'a lot'),* with the tendency being towards the upper end of the continuum.

Whilst by no means conclusive, the inference that could be taken from these results would seem to indicate that repeated experience in taking a SGW approach can elevate students' perceptions of either their own, or their peers' academic learning. Moreover, generally speaking the majority of students enjoy a SGW approach to learning.

4.2.2 Teachers' perceptions

Quantitative findings from six out of the eight questions posed on the teachers' baseline survey are interpreted below, with the final questions being omitted as they were simply

invitations to provide further information, and for ascertaining who was willing to participate in subsequent phases. The three questions identified on the teacher reflection surveys as being most easily quantifiable numerically (questions 2, 4 and 9) are integrated into these analyses, where applicable.
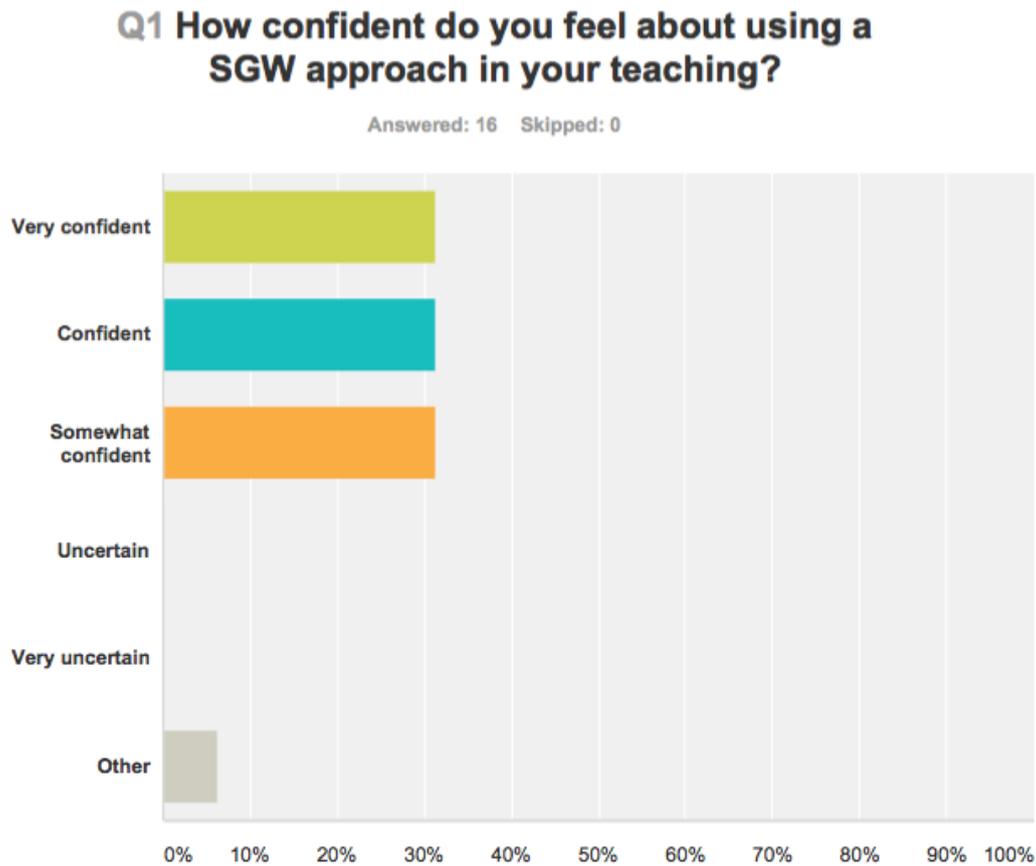
Figure 16 Question 1 Teachers' baseline survey

Responses to the first question, about confidence with utilising a SGW approach, reveal staff are equally divided amongst three options, that is 31.25% (or 5/16) feel either *'very confident,' 'confident'* or *'somewhat confident'* about using a SGW approach (see Figure 16). No teachers selected the *'uncertain,'* or *'very uncertain'* option, however one teacher did select *'other.'* This would appear to indicate whilst there is a degree of confidence with using this approach, approximately one third of the teachers are less than fully confident with SGW implementation.
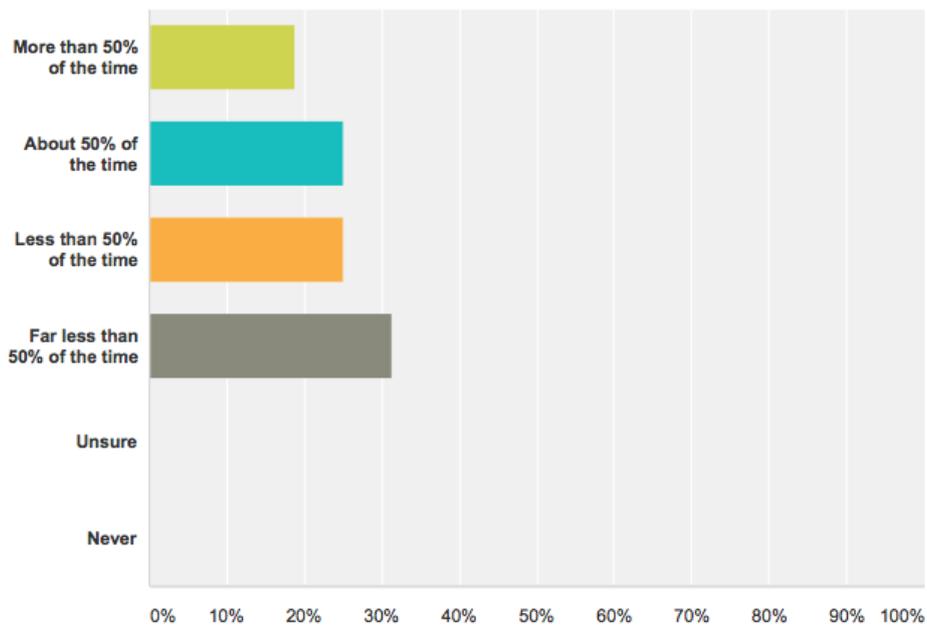
Figure 17 Question 2 Teachers' baseline survey

Similarly, in response to question 2 about the frequency of usage of a SGW approach, there is an almost equal spread across three options (see Figure 17). The most commonly chosen option is *'Far less than 50% of the time'* (31.25%, or 5/16), with *'about 50% of the time'* and *'less than 50% of the time'* polling just behind at 25%, or 4/16 teachers. On the basis of combining the former and latter responses, it can be calculated that more than half the teachers, 56.25% (or 9/16), are utilising approaches other than SGW over half of the time that they have contact with their students. In addition, the statistic that only 3/16 teachers report using SGW more than 50% of the time would seem to point to an area that needs more in-depth probing to uncover why.

Further insight as to why there could be this under -utilisation of a SGW approach is provided in response to question 4 from the teacher reflection surveys: *'What is the duration of this SGW learning experience?'* Here it is noted that out of the 11 episodes of

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SGW reflected on, seven are described as *'a one-off learning experience, completed in one period.'* Only one teacher respectively either planned for their SGW to continue into another period, or noted that this phase would last between 1-3 weeks. Therefore, it could be that pedagogically SGW engagement is more commonly perceived as an isolated learning experience, as opposed to one that could be sustained over a period of time.

Q3 How do you perceive SGW use as an approach for improving all students' learning of course content?

Answered: 16   Skipped: 0
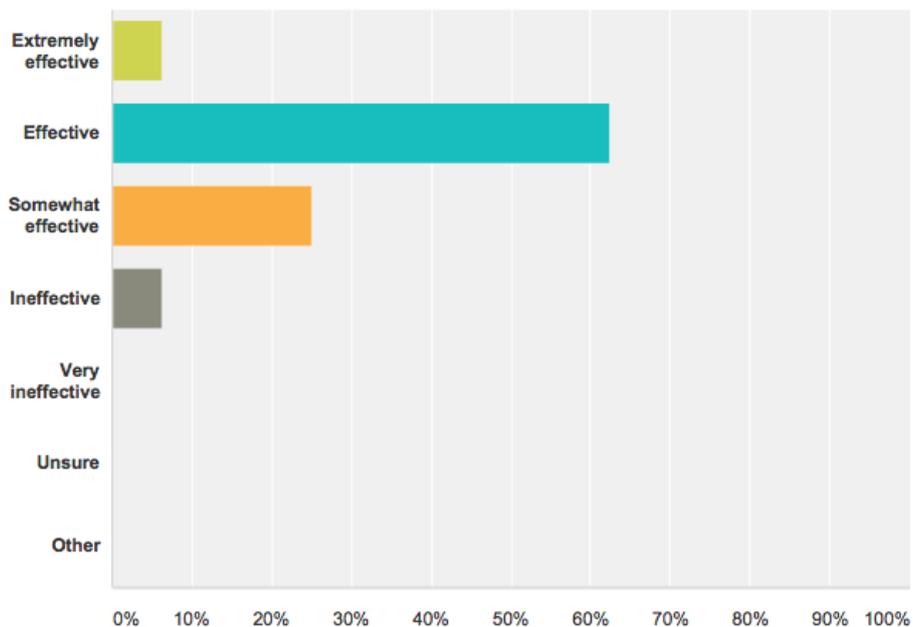
Figure 18 Question 3 Teachers' baseline survey

In response to question 3 (see Figure 18), which seeks to uncover perceptions about the overall efficacy of a SGW for learning content, it can be seen that the majority of teachers rate SGW highly, with 10/16 (or 62.5%) deeming it to be *'effective.'* However, it is noted there is one teacher at either end of the spectrum and 25% of teachers, or 4/16, view SGW as only a *'somewhat effective'* approach. Support for the majority view is borne out in responses to question 9 in the teacher reflection surveys, which asks: *'Overall, would you say that the SGW learning experience achieved the outcomes you had intended in terms of academic learning?'* Here six teachers selected *'Yes, definitely.'* Endorsement for the less

than positive perspective is found in the remaining responses to question 9 on the teachers' reflection surveys, where five teachers selected *'Yes, partially.'* Therefore, it seems that although most teachers see, and experience, merit in taking a SGW as a means of learning course content, not all are convinced/satisfied.
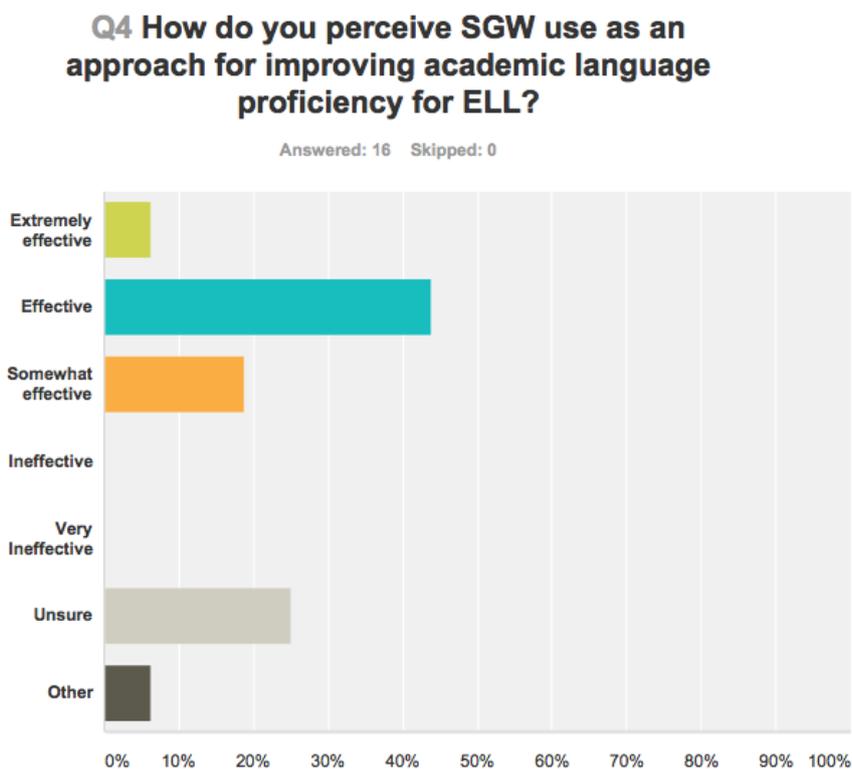
Figure 19 Question 4 Teachers' baseline survey

Responses about the efficacy of SGW as an approach for assisting ELLs' academic language proficiency reveal findings that are somewhat less favourable (see Figure 19). Although half of the teachers choose either *'effective'* or *'extremely effective'* (7/16 and 1/16 respectively), at the opposite end of the spectrum 4/16 teachers are *'unsure'* and one teacher elects the *'other'* option. It would seem then, in common with findings from the students, the perception is that although the majority of teachers feel SGW helps with general content learning, there is perceived to be less enhancement in the development of academic language afforded by taking a SGW approach.
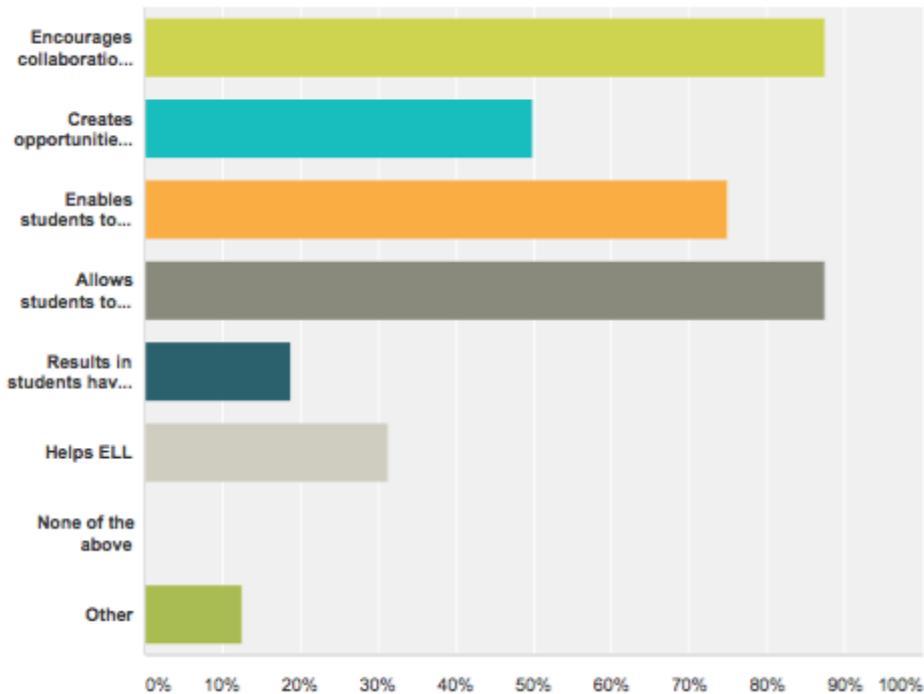
Figure 20 Question 5 Teachers' baseline survey

From the menu of eight items provided in question 5 (see Figure 20), enquiring about the most useful aspects/outcome of taking a SGW approach, two items are rated equally as high, namely *'Encourages collaboration between students'* and *'Allows students to develop social skills by cooperating and working together effectively'* (14/16, or 87.5% for both). The next most popular item is *'Enables students to support and assist one another's success through face-to-face interactions'* (12/16 or 75%). It is therefore concluded that collaboration, resulting in effective social interactions are the most highly valued outcomes of SGW. Interestingly, only 5/16 (31.25%) teachers selected *'helps ELLs'* which on balance could point to there being less perceived value of SGW for ELLs, as compared to

the value ascribed for collaboration and social skills generally.

The responses for question 6 (see Figure 21) regarding the barriers/challenges of adopting a SGW approach are extremely clear cut with well over half of the teachers (11/16 or 68.75%) selecting *'There is too much off-task talking.'* The next most commonly selected items are tied at 6/16 (or 37.50%) each, namely *'Students use SGW opportunities ineffectively'* and *'The academic differences between students makes it difficult to configure SGW.'* Thus, it would appear that while collaboration and social interaction are valued attributes of SGW interactions, issues surrounding how to manage sustained on-task focus within such groupings, on top of taking into consideration the impact of different proficiencies when configuring teams, are areas teachers find challenging and/or have uncertainty with. One interpretation of this finding could be teachers not having a solid pedagogical foundation on which to base their classroom management decisions. Further support for this interpretation is provided on the teacher reflection surveys, where it is noted that in response to question 2 *'Please select how the configuration of the SGW was determined'* only one teacher reports on using an *'ability grouping'* approach. The most common method for configuring group during this study's implementation period was *'Teacher's choice with students choosing the roles they had,'* used a total of four times out of eleven, followed by *'Students' choice, including what role they had in the group'* and *'Mixed ability groupings'* utilised three times each. As the first two of these options imply less direct teacher management it could be interpreted that knowledge about the impact of students' proficiencies and the pre-assignment of roles on outcomes is less of a factor in these teachers' decision-making processes when configuring groups.

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Q6 In your opinion, what are the challenges/barriers to taking a SGW approach to teaching and learning? (please select up to a maximum of four from the following statements, that is, feel free to choose between 0-4 responses from those listed below):

Answered: 16   Skipped: 0
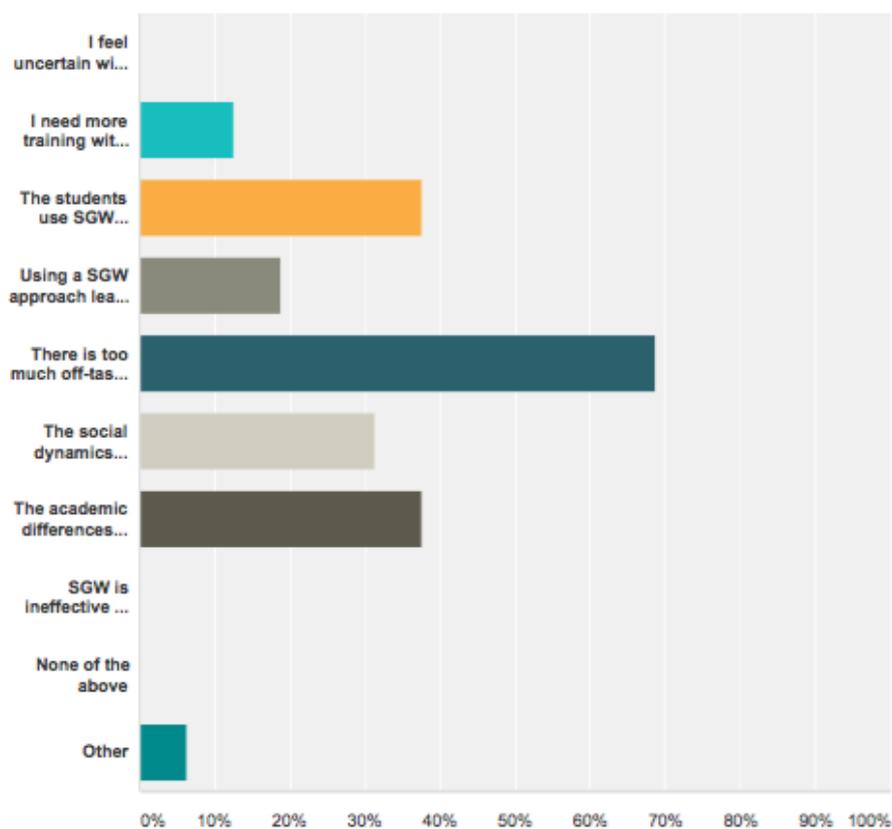
Figure 21 Question 6 Teachers' baseline survey

To sum up, it would appear from the quantitative findings that whilst students and teachers alike generally hold positive perceptions towards SGW, there is a degree of skepticism about some aspects, for example the affordances for academic language learning, the value of using it for summative assessment purposes and the difficulties presented by social dynamics. The qualitative phase presented an opportunity for the researcher to uncover findings that provide more depth and insights into an understanding of these perceptions. Therefore, for the purposes of triangulation the overall trend revealed in the quantitative

findings above are noted alongside any equivalent qualitative findings below.

4.3 Qualitative findings

4.3.1 Students' perspectives

The verbatim statements that follow are drawn from two different instruments, that is from the anonymous comments given in the initial baseline survey, and from the transcript of the student focus group, which consisted of three student volunteers. For the purposes of identification these verbatim remarks are coded as follows:

Anonymous baseline student survey: (S. Sur)

Student focus group = alias name + S. Fgp, for example: (Sue, S. Fgp)

4.3.1.1 Engagement factors

Perspectives that showed absolute engagement, with no conditions attached, focussed on the social harmony SGW interactions afforded, such as:

I think SGW allows more social interactions. I like social interactions (S. Sur)

Learning to work with different people. Making new friends (S. Sur)

It makes things more interesting, worthwhile and fun (S. Sur)

It makes school a bit more exciting because we usually work by ourselves (S. Sur)

I think students are most relaxed when they are doing group work, which means that they feel like they are learning more. So that's something that I think is really important. If you're relaxed you kind of learn more. It's easier to take on concepts so that's why it's true, yeah (Sue, S. Fgp)

Thus students perceive SGW as contributing to social connections, which in turn leads to an enjoyable classroom dynamic and to a lack of classroom stress, resulting in a situation that is perceived to be conducive to better learning. These findings therefore shed light on

the largely positive response to question 1 *'Do you like learning in SGW situations?'* above.

However, during the focus group meeting, one of the students elaborates on the proviso to engagement that would enhance her participation in SGW activities:

> *There's so many things I just want to get myself before I start talking to other people about it, and I know that everyone learns differently, but being thrown straight into a group situation might not be the best....maybe it's best to establish a level of knowledge before you're put into group work....I think that the effective part of group work comes in once you've established a common sense of knowledge, like a common level if you like, so that's why I think it is so useful, cos you discuss and you do sort of dive in more with group work so I think that's probably why the results are why they are, because people like to gain an understanding first, before they go into group work (Sue, S. Fgp)*

This comment indicates that the value placed on SGW interactions is conditional on having time to acquire a baseline understanding of content first. In addition it could be construed that there is a perception that SGW is not a good fit for introducing a topic.

Another significant cluster of perceptions are based on the academic outcomes of a SGW approach:

> *You always get some knowledge from other person and it could always help you (S.Sur)*

> *I do because then I can share my knowledge with others and vice versa (S. Sur)*

> *Group work means you can bounce ideas off other students and balance out strengths and weaknesses (S. Sur)*

> *By learning something specific with a small group of people, you tend to understand it a lot more (S. Sur)*

It can be more engaging for students to work and could lead to more motivated learning (S. Sur)

Sometimes the novelty of the presentation of information is very effective in helping students to remember the material. Students come up with some very interesting ways of presenting information, and therefore SGW can be beneficial (S.Sur)

From this collection of perspectives it can be seen that engagement in SGW is heightened because of the value placed on both the giving and receiving of ideas, specifically the opportunities and benefits of the exchange of ideas that SGW interactions affords. Included in this is improved retention and motivation, as suggested in the last comment, about memorability being a learning factor. These findings therefore provide further evidence for the reasons behind the predominately positive view given in response to question 3 'Do you think SGW helps you learn course content more effectively than working on your own?'.

The memorability factor indicated in the final comment above is echoed in relation to the learning of academic language in the following comments:

So I felt like when I'm discussing a concept, specifically in the Sciences, if I'm hearing the words in, like different sentences and stuff, then I can put two and two together and use them in my written work or in exams. You know I feel like there has to be discussion around the vocabulary otherwise you're never going to get it. That's how I feel. So I think it's essential (laughs) (Sue, S. Fgp)

Sharing vocabulary, thoughts, information in general amongst students in group situations is, in my experience, helpful. I tend to be much more likely to remember a piece of vocabulary that a classmate has given me in context rather than a whole list of words that a teacher prints out and distributes among her students (S. Sur)

Although the following comment is anonymous, it is assumed the student making it is a non-native English speaker due to the acknowledgement that it is 'helpful' to listen to

mother tongue English speakers:

> *When working in a group with people who for example have english as their mother tongue it is helpful to listen to them and the use of language they are applying to the subject. It helps to learn more academic language then (sic) being alone (S. Sur)*

The interpretation drawn from these comments is engagement in SGW is enhanced, for all students, including ELLs, due to the value placed on multiple exposures to new items of vocabulary; a principle of language learning, and, by varying the source of these items, memorability is increased. However, this is not a majority view, as evidenced by just over half of the respondents in the baseline survey selecting either *'unsure'* or *'never'* in response to question 4 *'Do you think SGW learning experiences help you learn the academic language required for all your subjects?'*

With respect to engagement based on further conditions or provisos, it is relevant to turn back once again to a major finding in the quantitative section, namely, that the highest polling factor for influencing students' perceptions on how they feel about participating in SGW is who is in their group. Reasons given for their engagement in SGW as a result of other group members once again center around a sense of social harmony, conditional on either liking their peers, or the degree to which team members are perceived as being helpful:

> *I like small group work if i like my group members (S. Sur)*

> *I think it mainly depends on who you are with. Even if it is a difficult task, if you are with students that help you and work well with you, it makes it a lot better (S. Sur)*

However, the following comment has a slightly different nuance with regards the reason for choosing to engage with others, one that is not reliant on 'enjoying' interactions with peers, but on being supported in a context they find challenging:

> *If it's a presentation, I might prefer to work with other people, but that's only because I don't like presenting by myself (S. Sur)*

Therefore, it is clear that some students have a rather more pragmatic view about the ways in which peers could assist with their learning, as in this case, where it is viewed as a way of reducing the demands on themselves.

The extent to which group members could assist with the academic outcome of grades is also a conditional factor of engagement:

> *I had a very positive experience with my last SGW. We had to do a TOK presentation. We also got a good grade. I learned a lot from my partner, because he was really into the subject! (S. Sur)*

> *Once I was put with an academic student, who i worked well together with. I got a better grade than I would've with a bad student (S. Sur)*

It is noted that these comments include the proviso that more value is placed on SGW interactions if the peer is perceived as knowledgeable, which in turn results in the sought after outcome of higher grades. These comments shed further light onto why almost 60% of students responded with less certainty about the extent to which SGW could assist with summative grades (question 5 in the baseline survey) as it is assumed that the experience of working with more knowledgeable peers, as reported above, is not a common place occurrence for most participants.

Finally, some students share perceptions leading to engagement that are unequivocal in terms of which management strategies should be employed by their teachers:

> *Clear instructions means clear comprehension of the task and thus makes it feel easier and achievable (S. Sur)*

> *Show an example of expected results (S. Sur)*

Therefore, value is placed on clear communication of expectations and objectives, with exemplars providing further support. Quantitative findings also bear out that students value clarity of expectations, as evidenced by the most selected management strategy in response to question 7 being *'Supplying each small group with a checklist/written instructions,'* chosen by over 60% of the students.

Other students' engagement is conditional on the strategies teachers employ to determine group membership:

> *I think it's best when a teacher decides, but then the groups MUST be fair. I like it this way, because you don't have to go through the trouble of 'who wants to be in my group' and then being put with all the leftovers (S. Sur)*

> *I actually think it is better to have a teacher decide, just because it's arbitrary.....Then again, like minds seem to click, and sometimes such a situation is the best for SGW work...Therefore if students choose who to be in groups with, they might possibly work more productively (S. Sur)*

Here it can be seen that students' engagement is conflicted, as participants consider the potential merits of the teacher choosing how groups are configured, versus being given the autonomy to do it themselves. Based on a surface analysis of the comments above, it seems that the students are wanting more equitable outcomes, because of the use of the terms 'fair' and 'arbitrary.' However, on looking more closely at the nuances, the desirable outcome for the first student is being placed with people they perceive as having some social status, as opposed to 'the leftovers,' and for the second student being with peers deemed as having similar levels of proficiency, or 'like mind,' is valued. This split in perceptions is born out in the quantitative findings in response to question 6, where only slightly more students feel it is better if they decided group membership themselves, compared with those who prefer teachers to make the decision. Therefore, it seems there

would be value in handing over autonomy at times so teachers could observe who students worked well with, ultimately putting both students and teachers in a better position to make more considered configurations for subsequent SGW activities.

To sum up, students' reasons for engaging in SGW are primarily based around perceptions to do with:

- the social harmony that SGW interactions affords, in terms of both intra-personal gains, such as feelings of relaxation, excitement and support, and inter-personal gains, such as making new friends, and the collaboration process
- increased academic harmony, due to opportunities for exchanging ideas, and benefits, such as improved retention, especially of academic language, increased motivation and, for some, higher grades

In addition, there are a further set of findings around perceptions of either total engagement, or engagement with a proviso, dependent on:

- teacher management/approach, with some students more likely to engage with increased teacher direction, whilst others appear to want more autonomy, specifically in deciding how groups are configured

4.3.1.2 Disengagement factors

These findings are presented in the same sequence as above, but in mirror form, that is, perceptions that show evidence of social disharmony, followed by academic disharmony, and those that lead to disengagement because of aspects of teacher management. An additional cluster of findings around other logistical aspects that were not mirrored in the engagement findings are presented at the end of this segment.

The first set of comments are from students who, in contrast to the previous set of findings, choose to disengage from SGW because they do not place any value on social interactions:

I mostly prefer working on my own. It (sic) find it easier, and also do not like depending on others (S.Sur)

I think it is better to sit down by yourself and get it done (S. Sur)

I feel like I lose a great bit of control when I am tied down to lots of SGW work (S. Sur)

Thus, instead of feeling any sense of harmony, or benefits as a result of interacting with others, these students prefer to be independent from any form of negotiation, perceiving there is more value in working on their own. Although evidence of disengagement from SGW is a perception shared by just over a quarter of the sample group in the quantitative findings in response to question 1: '*Do you like learning in SGW situations?*, it is nevertheless not an insignificant portion, and therefore worth noting.

In relation to question 2, about the impact of who was in their group being the most influential factor about how they felt about participating in SGW, a number of negative characteristics lead to these students' likelihood of disengaging from their peers during SGW:

Some people are bossy or lazy (S. Sur)

Uncooperative people in your group (S. Sur)

If I work with people who are stubborn or don't think the same way as I do I get frustrated and pretty much give up (S. Sur)

Sometimes it's rather taxing to work in groups, as other students may not feel the same level of motivation for or take the project as seriously as you and therefore can end up the one stuck with doing the majority of the work (S. Sur)

And the most creative metaphor to describe their reason for potential disengagement is this anonymous response:

I think that the idea of small group work is nice. However, I don't like it all the

time because it might be unproductive if you have to work with a potato sack
(S. Sur)

Thus, students' feelings of social disharmony are exacerbated by challenging inter-personal dynamics within groups, including certain personality traits, and differing motivation levels and work ethics, as opposed to the synergy derived from interactions reported above, in the engagement findings.   Once again, this would appear to indicate the value of teachers having some insights into both the social dynamics and personality traits of the students in their classes when considering how groups should be configured.

The following comments about academic outcomes mirror responses listed in the engagement section, where students place value on working with a peer they perceive as more knowledgeable:

> *I've been put with students who weren't on the same level as me so the work*
> *quality was bad (S. Sur)*

Clearly then, the opposite is also true, as some students feel hindered by peers who they perceive as having lower levels of competence. This is further support for the previously expressed conclusion that SGW participation may be enhanced if teachers have a heightened awareness of their students' academic ability levels, and take into account the impact of certain combinations of proficiencies when configuring groups.

In addition to students being likely to disengage from SGW due to differences in academic proficiency, there appear to be challenges presented by perceptions about differences in linguistic proficiency, as these comments show:

> *I was put together with two students who aren't fluent in english in english*
> *class and I had to make a presentation for the class. They both didn't listen to*
> *the task, and thought they knew better than me. They annoyed me (S. Sur)*

> *I've been put with students who didn't understand english, so I had to explain*

the whole task over and over (S. Sur)

Thus, some students clearly experience frustration when working with students whose language competencies are lower, and as a result place little or no value on interactions with ELLs. Given the multi-lingual diversity that exists within the context of this research, combined with the recent push within the IB for all DP teachers to integrate more collaborative learning experiences into their teaching, as well as "understand how [students' diverse language profiles] are a potential resource for learning" (IBO, 2013, p. 29) these findings are somewhat worrying and will be taken up further in the Discussions section.

In contrast to those who value the multiple exposures to academic vocabulary that SGW provides, others perceive that such language is actually avoided, thus removing an opportunity for learning, and thereby resulting in a further reason to disengage:

> *Because when students work together they use their own language to communicate comfortably therefore we don't really stretch to use academic language (S. Sur)*
>
> *I am not quite sure yet if SGW helps me learn academic language. Most of the time the people in the group do not talk using academical language; they just use everyday language (S. Sur)*
>
> *Because by presenting and trying to make it too interesting for the others to follow, we somewhat oversimplify the project (S. Sur)*

These findings give a more in-depth picture as to why just over half the students were either uncertain or unconvinced that SGW helps with their uptake of academic language (question 4 – students' baseline survey). The understanding gleaned from these qualitative findings is that the language used during SGW time is not significantly different from their regular social exchanges. Why this wide discrepancy of perceptions into whether or not

SGW involvement enhances academic language learning exists, is another area to be taken up in the Discussions chapter.

The next set of findings are perceptions about the impact of SGW on grades. They add greater depth to the quantitative finding for question 5 where almost 60%, selected either *'unsure,' 'didn't think'* or *'never.'* These next two comments show how SGW is perceived on an individual level, with the first student indicating it lacks sufficient academic rigor to be utilised for summative assessment tasks:

> *When it comes to important things, like the summatives and so forth, just solo work would be wiser (small laugh) (Kattrin, S. Fgp)*

Whereas this student reports increased anxiety if SGW is the vehicle for summative grading:

> *In general when an SGW assignment is summative, I find I do not do as well, and moreover feel more stressed than if the assignment was individual (S. Sur)*

It is clear there would be value in redefining the status of SGW as a vehicle for summative assessment, in terms of perceiving it as an academically rigorous approach, as the first perception would appear to be undervaluing it, and the second shows apprehension about outcomes.

The next comment also mentions the outcome of grades, but focusses on the impact of inequitable work distribution within SGW, leading to disengagement:

> *Usually, when I am in a group, I do all the work or nothing at all. People either tell me to do everything or just completely ignore me.... In both cases, SGW does not help me reach a higher grade (S. Sur)*

To sum up, these students are expressing levels of dissatisfaction and reluctance to engage in SGW as they perceive it adds little or nothing to the summative assessment process due

to beliefs around lack of suitability, uncertainty about outcomes, and experiences of inequity. Thus, it would appear there is a need for more training, support and monitoring in the use of SGW for summative assessment purposes, a further topic to be taken up in the Discussions chapter.

Disengagement is also conditional on the type of task and/or the subject area being undertaken in SGW settings, with students frequently expressing a desire for more opportunity to work on their own:

> *If it's a subject I enjoy, I'd be comfortable working by myself (S. Sur)*

> *If it's a creative project that the group is working on, I know that I personally feel limited when I have to take everyone else's different ideas into consideration rather than just continue with my own creative vision (...) especially when it's a significant one, with a group can be tricky and often constrictive (S. Sur)*

> *Like for example English, to do essay practice and stuff, you'd want that to be individual so that it could be really your strong influences (pause) I think it does depend on curriculum area (Sue, S. Fgp)*

It is noted that the last two comments focus on the outcome of the task as being the most important factor. That is to say, these students would likely choose to disengage because of not wanting to compromise the 'product' of their learning. Hence, there could be value in teachers carefully considering the suitability, or 'fit' ahead of implementing a SGW approach, in terms of whether it is the *process* of the interaction that is the focus, or the *outcome*, and then making these objectives clear to the students.

As in the engagement section, a significant set of perceptions center around the role of the teacher, with disengagement arising from how teachers manage SGW implementation. The first comment mirrors a comment made in the engagement section, that is, the importance of clarity of instructions:

90

If the teacher makes unclear instructions, then no one knows what to do and nothing gets done (S. Sur)

This finding gives more insight into the quantitative results for question 7 where the top three management strategies point to increased teacher intervention being valued. Therefore, potential disengagement from SGW could be reduced by providing very clear instructions in the form of checklists, in addition to having regular check-in points, and defining individual roles.

This next comment echoes one made previously in the equivalent portion of the engagement findings, above, as it acknowledges teachers may have some knowledge of their students' academic, or performance, proficiency. However, this student perceives there are shortcomings in their teachers' knowledge of the social dynamics between classmates:

Teachers are able to see which people have better skills than others and can decide on groups where we are able to help each other but don't always know which people we work with best (S. Sur)

It seems as well as teachers knowing their students in a more rounded sense, greater attention to addressing group relationship issues could also assist in averting disengagement from SGW.

The following cluster of findings focus on SGW management where teachers appear to be allowing students more autonomy, with the first comment indicating a 'hands off' approach could lead to this student disengaging:

The barriers and challenges often are to tell other people in the group what to do and check if they do their part. It's also difficult to tell other members to stop chatting with each other or even with other groups. This is even harder if the teacher doesn't see that the group won't or can't work together (S. Sur)

Whereas this student focusses on the impediment of increased social interactions taking time away from work:

> *Being with your friends will also take time off the work since much time will be spent on joking around (S. Sur)*

The conclusion that could be made here is that, in the short term, students would value timely intervention from their teachers, particularly with keeping peers on track, and focussed. In the longer term, as the first student mentions they find it 'difficult' to intervene, training in *how* to interact productively with each other could enhance engagement in SGW. This would align with the quantitative responses to question 8, where the highest polling strategies that students would value their peers exhibiting are related to equity of roles, mutual responsibility and the ability to negotiate respectfully with each other.

Further support for the notion of providing students with training on how to interact productively with one another is provided in the following comments, where both students appear to be expressing the opinion that they would opt to disengage from SGW if teachers employed the strategy of letting them choose their own groups:

> *If we chose ourselves we chose people we get along with and know them well but aren't always the best working conditions (S. Sur)*

> *Sometimes it can create an uncomfortable social situation if students have to decide amongst themselves who will be in groups together (always the likelihood of certain students being left out, etc.) (S. Sur)*

Interestingly, these responses conflict with the quantitative tally for question 6, as although far from resounding, the most commonly chosen option is students deciding for themselves (20/63), over teachers making the decision (14/63). However, the lack of certainty in this finding is reflected in the fact that 11/63 of students remain *'unsure'* about which option is

best. Therefore, it seems there is a tenuous balancing act in deciding who should determine how groups are configured, as results are not clear cut.

Next, a series of findings about the impact of one mode of SGW implementation on academic outcomes that are not mirrored in the engagement section. This first perception focusses on academic disharmony caused by reduced language learning opportunities:

> *I feel like people will just end up learning the academic language for their section of the topic (S. Sur)*

A related finding was this comment about the impact on grades:

> *Small group work makes you not do some things which you might not learn well enough, which has a negative effect on my grades (S. Sur)*

What these perceptions have in common is they appear to be alluding to one specific form of SGW implementation, namely where groups are responsible for teaching their peers separate, discrete chunks of content, or 'peer teaching.' Therefore, these students feel that by utilising SGW in a peer teaching manner, gaps in learning occur, resulting in reduced academic language uptake, and lower grades.

These last two findings show how the students feel about this way of operationalising SGW:

> *The work should be split evenly (...) at the end of the program (sic) everybody should know the WHOLE topic well, not just the individual sections of work that they did, and I feel that SGW would just achieve people learning parts of a topic (S. Sur)*

> *It (SGW) has a bigger risk factor if you allow students to teach more (Alice, S. Fgp)*

To sum up, as these students appear to be commenting on one specific mode causing their

disengagement, value could be added by widening their experience of how SGW activities can be operationalised, a further topic to be taken up in the Discussions chapter.

Finally, an additional set of findings centre around the impact of logistics on approaches to learning, specifically the constraints caused by issues to do with time and space. Starting with time, a number of students may choose to disengage with SGW because they perceive it slows them down:

> *I usually work faster and more efficiently on my own, and think that any type of group work slows down my learning process (S. Sur)*

The perception here is that academic performance is hindered due to the pace of SGW interactions. In contrast, some students feel the opposite; that SGW is a too fast-paced, which compromises their learning, and therefore this is the condition that leads to their feelings of disengagement:

> *I could just as easily do the work on my own. It would take longer, fine, however, then I know everything (S. Sur)*

> *I feel like I learn best on my own, because I am a slow learner and need to take my time. I feel that, in group settings, things go to (sic) fast and I end up not understanding any of the material (S. Sur)*

Thus, students may value teachers making accommodations for their individual approaches to learning in the midst of SGW implementation.

Another student comments on a logistical aspect to do with space causing potential disengagement:

> *Allowing students to work outside usually results in someone getting in trouble, because they're not in the teacher's view (S. Sur)*

This would appear to present further evidence that disengagement from SGW could be

reduced by timely intervention on the part of the teachers, especially when being given the freedom to work outside conventional spaces.

The remaining comment leading to disengagement is as a result of a combination of both time and space factors:

> *If it is going to involve us having to collaborate outside of school and if it is difficult to do that due to time constraints, it is bothersome (S. Sur)*

In this case it would appear disengagement could be averted if the logistical parameters put around the completion of tasks are made as feasible as possible.

To sum up, factors leading to students' disengagement from a SGW approach include perceptions around:

- conflict with preferred approach to learning

- social disharmony between group members

- academic disharmony due to differing levels of competency, and a perceived disconnect between SGW and specific subjects, including the summative assessment of content

- teacher management/strategies resulting in a dichotomy between opposing needs for greater independence/autonomy versus more direction, in addition to perceptions of inadequate course coverage due to the implementation of one specific mode of SGW

- logistical barriers created by factors to do with time and space

4.3.2 Teachers' perspectives

The qualitative findings below are taken from comments given in the anonymous baseline survey that 16 Diploma-level teachers completed, plus relevant quotes from transcripts of the two teacher focus groups, which comprised of three teachers each, and these same

teachers' respective 'Teacher reflection surveys' (completed after they had implemented two episodes of SGW, as per the research design). As with the students' findings, equivalent quantitative evidence from the numerical components of the teachers' data collections tools is interwoven where it is deemed relevant. Responses from each of these data collection tools are coded as followed:

Teacher Survey: (T. Sur)

Focus groups = T. Fgp + alias + subject area: (T. Fgp – Mary, Biology)

Comments from the reflections = T. Rfl + alias + subject area:

(T. Rfl – Mary, Biology)

4.3.2.1 Engagement factors

In common with the students, there are a number of comments about the perceived social harmony that SGW involvement can cultivate:

It gives students the opportunity to work in teams and build relationships (T. Sur)

Enables students to develop social skills by cooperating and working together effectively (T. Sur)

Working in groups or with others is an important life skill (T. Fgp – Louise, Chemistry)

Learning improves through collaboration (T. Fgp - Petra, Biology)

Interestingly, only one teacher comments from the perspective of their own engagement with SGW in relation to increased social harmony:

I have build up a good rapport with my students to try this (T. Sur)

These findings provide further evidence to support responses to question 5 in the teacher survey, where nearly all the teachers rate the development and fostering of collaboration

as the most highly valued attribute of SGW engagement.

In contrast with some students' perceptions, teachers appear more convinced that engagement with SGW assists with the consolidation and extension of subject specific/academic language, for example:

> *I heard some interesting mathematical conversations. Students had to use their algebra skills to generalise - this was a useful exercise in both algebraic manipulation and the meaning of proof. Students generally seemed to enjoy the challenge and for most the exercise was useful for revision purposes (T. Rfl – Jill, Maths)*

> *The students were very engaged and firstly exchanged their point of views practising known content and grammar. They also learned arguments and expressions from each other (T. Refl – Anka, German)*

Although the precise proportion of ELLs in these participants' classes is unknown (for ethical reasons, as previously stated), based on the statistic that 67 countries are represented amongst the student body, these comments provide some evidence to show the potential of SGW for enhancing academic language usage. This is in terms of knowing how to interact in discipline-appropriate ways, as in the observation shared by the Maths teacher, and with regards grammar and vocabulary, such as occurred within the context of the German language class.

A further miscellaneous collection of perspectives centering around potential affordances as a result of engaging with SGW include:

> *I think that ELLs benefit from working in groups as it would often be very difficult for them to do a task on their own. Being able to explain your knowledge to others is a high level of understanding (T. Sur).*

> *A positive outcome is in that time I had another student teach the answers to those problems. I think it was good for that students confidence as well as*

practicing the new language learned but to have someone different explain it in their own language is helpful to keep it simplified (T. Rfl – Louise, Chemistry)

Ownership of learning (T. Sur).

Everyone knows more now than before, groups taught each other (T. Rfl – Petra, Biology)

I feel they get more actively involved and that includes those that haven't slept much that night, you know, at least they do something, rather than sit there and so I think in a good combination with checking where they are at, and reinforcing certain aspects of the curriculum it can be a very, well a more powerful way for this particular group of Diploma level students (T. Fgp - Hans, Physics)

To sum up, it would appear that one reason for the majority of teachers in the baseline survey perceiving SGW to be an effective approach for improving learning outcomes is because of beliefs around the opportunities it affords to consolidate and extend the uptake of subject specific language. In addition, there is the perception that engagement in SGW can broaden and deepen content knowledge, especially for ELLs, as well as fostering a sense of ownership, autonomy and more active involvement with the learning process. Furthermore, it provides teachers with further opportunities to 'check in' on understanding, as noted in the last comment above.

Another teacher elaborates on this notion that SGW has the potential to provide greater insights into what the students have not learnt:

The session proved to be a very effective way for me to assess what the students had learned as well as misconceptions and gaps in knowledge and as a formative exercise was really worth while. I was able to follow up in the next lesson addressing areas that needed more explanation. I don't think I would have been aware of these otherwise (T. Refl - Mary, Biology)

The perspectives that appear to have provisos attached, and which appear to be centered

around perceptions to do with task fit are as follows:

> *SGW lends itself well to something that's very structured (T. Fgp - Petra, Biology)*

> *Yeah, 'go and discuss this now' wont work. You need clear targets and clear outcomes defined I think, otherwise it's too easy to go astray (T. Fgp - Mary, Biology)*

> *At grade 12 level I only grade tests and internal assessment so the SGW is only used for learning (T. Fgp - Mary, Biology)*

Following on from the last comment, above, one of the focus group participants has a contrary perception, stating that she does allocate summative grades based on SGW from time to time. The reasons she gives seem to be based on a pedagogical perspective; that the students should be given more ownership of learning, in terms of managing dynamics within the group, or selecting the manner in which they participate, as well as for logistical purposes, in that the process of grading could be sped up:

> *With the assessed SGW I have given the same grade for all. My rationale behind that is that I want them to choose their partners and work together in a way that justifies this. I told them before that they have to accept the same grade, so therefore must ensure they share the work equally. I have also done this, as I did not see how I could mark so many individual reports from the 47 Gd 11s, so by having them submit a group report I reduced the marking hours. Saying that, I gave them the choice to work alone or in SG (T. Fgp - Petra, Biology)*

Therefore it would appear that teachers' engagement in SGW is conditional on what their pedagogical perspective is regarding which tasks are the 'best fit' for such an approach. In addition, these findings could be seen to be shedding light on responses to question 2, about how frequently a SGW approach is utilised, as here it is noted that only 3/16 teachers report using SGW more than 50% of the time as a mode for teaching and learning. It could

be construed that teachers spend less time on implementing structured tasks (which two of the teachers above perceive as being a necessary criteria for being the 'best fit' for SGW) due to the perception that such tasks take more time, both in terms of planning, and managing, and therefore this creates a barrier for teachers in an already time-poor environment. In contrast at least one teacher views a SGW approach as time-saving, particularly with regards summative assessment tasks.

To sum up, in common with the students, the primary engagement factors for teachers centered around perceptions to do with:

- social harmony, for example: team building, collaboration and the fostering of rapport
- improved academic harmony, for example: subject-specific language utilisation and consolidation, diagnostic purposes and increased ownership of learning

Engagement with provisos are based around perceptions to do with:

- the type and structure of tasks
- logistical factors primarily to do with time

4.3.2.2 Disengagement factors

One teacher shared a perception in relation to social disharmony, leading to their likelihood to disengage with the approach:

> *The social dynamics between students makes it difficult to configure SGW (e.g male and female combinations) (T. Sur)*

Whilst other teachers appear to be voicing potential disengagement with utilising a SGW approach due to factors related to academic disharmony:

> *There is hesitation in doing SGW because of the varied levels of interest and motivation (T. Sur)*

If you've got quite a few 'high flyers' I think they just race off, at their pace, and perhaps don't want to support their peers (T. Fgp - Louise, Chemistry)

Other perceptions focus on the likelihood of disengagement created by differences in students' approaches to learning:

There are some students that really hate it; there are some students who just prefer to work on their own, and there are some kids that love it. It really depends on what kind of learner they are, or they feel they are held back by working in a group (T. Fgp - Louise, Chemistry).

Some students found it difficult to get started as they were not used to such open tasks. Some students perhaps took a back seat whilst others did more of the work (T. Rfl - Jill, Maths)

In the course of one of the focus group discussions, one teacher brings up the issue of age of the students as leading to her feelings of disengagement with a SGW approach:

The younger guys get more off task, than the older guys I find, because they are more able to keep each other on task, because they are more interested in the subject. So yeah, I've had experiences where I don't want to do group work with certain classes (T. Fgp - Louise, Chemistry)

These findings contribute to a more in-depth understanding of responses to question 6, about perceived barriers and challenges to SGW implementation. It would appear teachers find SGW management a challenge primarily because of perceptions related to student resistance to the approach, with the age of students being an additional contributing factor. These comments would seem to support the notion that greater teacher insight into strategies that could help avert tensions, such as the affordances provided by the management of certain group configurations and possibly different modes of operationalising SGW.

A further cluster of perceptions leading to disengagement centre around difficulties in assessing, both at the formative and summative stages, for example:

Sometimes, I have had the feeling especially in research that not all members get to participate fully and can get through a group activity without understanding anything (T. Sur)

The unfairness of giving a whole group grade when it is clear that not everyone had made an equal contribution to the task (T. Fgp - Mary, Biology)

I never do group work for any assessed piece because I do not believe you can accurately ascertain individual grades, and I also don't think it's always fair to give a group grade (T. Fgp - Jill, Maths)

Once again, these responses are linked to question 6, regarding barriers and challenges to implementing a SGW approach. This time it would appear that training in strategies and mechanisms that enable teachers to establish who contributed what in SGW assessments would go some way towards reducing the perceived barrier of lack of equity.

Indeed, explicit comments are made about the logistical constraints caused by lack of time, for training, as well as for planning and implementation:

I need more training with using a SGW approach (T. Sur)

Maybe it is that people would like to do it, and they think it is effective, but at the same time they think 'Oh I don't have the time to plan it, and I don't have the time to implement it' (sounds of agreement from Petra and Louise). So I think it's always coming back to the factor of time (T. Fgp - Mary, Biology)

Further evidence of barriers caused by lack of time to plan are provided in this portion of dialogue lifted from an exchange that occurred between teachers during one of the focus group meetings. It is in response to being shown the students' preferred strategies teachers could use to make SGW activities more effective learning experiences (question 7 on the

students' baseline survey):

*Everything, they want a checklist, they want assigned roles (pause) (T. Fgp –
Anka, German)*

So basically you give them a worksheet (pause) (T. Fgp – Mary, Biology)

*They have to learn this, it doesn't work like this. They are going to uni in a
year. Who's going to (pause). They will always work in groups there (T. Fgp –
Anka, German)*

Although not easily apparent on a simple reading of the dialogue, the body language and
tone of voice used in this exchange leads the researcher to infer that having to design and
implement scaffolding in the form of providing checklists and pre-assigning roles on any
sort of on-going basis is a factor that is viewed as a barrier to utilising SGW for one or
both of these teachers. Furthermore, this could be construed as a pedagogical stance; that
students should be more independent and not requiring such scaffolding at this level. This
is a further topic to be taken up in the Discussion chapter.

Another teacher provides specific evidence of the constraint caused by pressure to get
through the DP curriculum:

*It's easier to do it with younger ages, just because the [DP] curriculum has got
so content-driven (T. Fgp - Petra, Biology)*

In addition, logistical constraints to do with space are also mentioned, with the first
comment being an observation about the set up in Science classrooms, and the second
about classrooms generally:

*Seats are set in pairs and groups of three and are difficult to move around to
more than that (T. Sur)*

*Wandering past people's classrooms, most of the times people are sat in rows
(T. Fgp - Petra, Biology)*

Therefore the logistical barriers caused by lack of time for training, planning and pressure to get through content, in addition to the constraints caused by physical spaces all contribute to a greater understanding of the barriers and challenges to SGW implementation perceived by teachers.

To sum up, factors leading to disengagement from the teachers' perspectives are primarily based around:

- social disharmony between group members

- academic disharmony between group members

- conflict with preferred approaches to learning

- not a good fit for all subjects/tasks, particularly summative assessment tasks

- logistical constraints, specifically to do with lack of time and physical space

4.4 Conclusions

4.4.1 Students' perspectives

The quantitative portion of findings indicate that the majority of students have positive perceptions towards SGW, with most participants indicating a belief that it does assist with general learning. However, more than half have less favorable perceptions about the degree to which SGW assists with their uptake of academic language, with even lower perceptions about the possible affordances for achieving higher summative grades. Therefore, it seems that students do not value the ability to participate in task-focused discussion as part of an academic language learning process, whereas it could be argued that the discourse competence they are acquiring, that is, the normalising of discussing cognitively challenging, and perhaps contested matters, would likely be firm preparation for tertiary study.

The factor that yields the highest statistical result for influencing their perceptions about

involvement in SGW is who is in their group, with students indicating a slightly higher preference for determining group composition themselves, as opposed to teachers choosing. However, the majority of students have a preference for some scaffolding being put in place by the teachers in order to make SGW a more effective and equitable learning experience. Similarly, from their peers they want increased equity and collaboration throughout the SGW learning process. These findings would seem to indicate that whilst students like a degree of autonomy, they place value on what teachers can offer in terms of scaffolding of the task, and in terms of managing their interactions with one another by more timely interventions.

The statistical finding of 'who is in my group' being of paramount importance is borne out by the qualitative findings, that is to say – based on a reflective interpretation of their perceptions, the combination of students within SGW teams can be a polarising factor, resulting in feelings along the whole length of the continuum from total engagement to total disengagement. Factors include whether the other members are their friends or not (the biggest influence), the perceived academic and language competencies within the group, and people's work ethic (for example, whether they are perceived as 'motivated' or 'lazy'). Therefore, it appears likely students would value teachers having greater insight into their friendship networks, personalities and capabilities in order to create workable combinations, leading to increased social and academic harmony when configuring groups for specific tasks.

Qualitative findings also reveal that a number of students choose to disengage from SGW due to the perception that there is little value in interacting with others, particularly because they feel that SGW is not an effective way of learning for them. For at least one student the perspective leading to disengagement is conditional on the belief that there needs to be a solid foundation of knowledge first, before entering into a SGW format. Whilst a further cluster of findings show students determine their engagement in SGW activities based on whether or not they perceive the subject/content area to be a good fit for a SGW approach. As a result, it would appear teachers should carefully consider

rationales for selecting a SGW approach in the first instance, in order to maximise engagement ahead of delivery, whilst not ignoring the fact that some students prefer not to engage in SGW at all.

With regards perceptions about academic outcomes, the qualitative findings once again support the quantitative data in terms of the polarity of views. Firstly, perceptions are divided between those students who engage due to the belief that SGW does assist with overall learning, academic language uptake and higher summative grades, and those who do not. In addition, students in the latter group also express the potential to disengage due to logistical barriers, primarily to do with the timing/pacing of SGW activities, that is, it is either too fast or too slow for their preferred rate of learning.

4.4.2 Teachers' perspectives

A review of the quantitative findings from the teachers leads to the conclusion that a significant portion of teachers (33%) are not fully confident with using a SGW approach, with less than a quarter of teachers incorporating a SGW approach into their lessons more than 50% of the time. Therefore, SGW would appear to be an under-utilised approach due, at least in part, to a reported lack of confidence and/or training.

In terms of what value it affords learning, quantitative findings show that two thirds of teachers feel SGW is an effective approach for the uptake of overall course content, and half of the teachers feel it useful for improving academic language proficiency for ELLs. The main value of SGW is perceived to be an opportunity to foster collaboration between students, and to further develop social skills by cooperating and working together effectively. Analysis of the qualitative findings yield similar results, in that participants comment on increased engagement due to the enhanced academic and social outcomes SGW affords.

Conversely, the biggest challenges of SGW implementation according to the quantitative

findings, arise from academic disharmony within groups, as well as management issues. Similarly, qualitative findings reveal that teachers' disengagement with SGW centres around difficulties managing and maintaining academic harmony, with additional findings to do with challenges caused by social disharmony. In addition, there is the perception that SGW is not a 'good fit' with some students' approaches to learning, nor some subjects, in particular for assessment purposes, and is compounded by logistical constraints.

To sum up, it would seem that teachers' perceptions regarding disengagement from SGW, are primarily to do with issues around how to manage SGW, and the logistical barriers created by time and space. Specifically data uncovers perceptions that there is not enough time to plan and implement SGW, that further training in SGW would be welcomed, and that there are physical challenges in terms of classroom configurations, for example fixed benches in the laboratories.

As can seen in the reported findings, whilst there are commonalities between the two sets of participants, each group has unique perspectives about certain aspects of teaching and learning using a SGW approach. The items deemed to be the most salient will be discussed and interpreted in light of existing literature in the following chapter.

Chapter 5 Discussion

5.1 Introduction

This chapter commences with a discussion of two factors which are felt to have a significant effect on the context of this study: the effect of the chosen language of instruction; and the influence of a recent policy change, both of which will be carried over into the next chapter. Findings and/or literature that link to each of these key aspects will be discussed in turn.

Key findings for each of the research questions will be discussed next, particularly in relation to their connection with the literature. Where practicable findings from the students' data collection tools will be discussed and compared with literature first, followed by those of their teachers'. However, from time to time findings from both sets of participants concur, therefore discussion and comparisons for these items will be combined. As there is a certain amount of overlap between the findings on perceptions (RQ1), and those on challenges (RQ2) a discussion of these findings and relevant literature are combined. The reader's attention is drawn to the fact that owing to teacher management strategies (RQ3) being found to be of paramount importance resulting in either engagement or disengagement with a SGW approach, this is where the bulk of the discussion is directed.

5.2 Contextual factors

It is believed that the language of instruction utilised within this context has an influence on the findings. In common with the vast majority of international schools worldwide, English is the medium being used. Evidence of this widespread preference is found on the International Consultants for Education and Fairs [ICEF] Monitor (2014) website, which states for the 2013-2014 academic year "There are now 7,017 international schools around the world meeting the learning needs of over 3.5 million students, all using English as the language for learning" (New data on international schools suggests continued strong

growth, n.p.).

The outcome of this widespread dominance of English has resulted in a number of researchers (Cummins, 2000; Carder, 2007; Gallagher, 2008) sounding strong warnings about the potential for negative outcomes for ELLs studying within such institutions. As a result, the researcher finds it somewhat natural to suspend the primary theoretical underpinning of socio-culturalism for this portion of the discussion and adopt a socio-political perspective instead. That being the case, it is felt pertinent to separate out any references to ELLs in the findings for discussion and align them with relevant literature, to uncover what they may reveal about perceptions within this context, with factors deemed as most salient being carried over into the implications portion of the next chapter.

The degree to which SGW is deemed to be an effective approach for academic language learning is the first aspect to be examined. Whilst by no means resounding, quantitative data from the students' baseline survey reveals that just under 50% hold positive perceptions about this aspect of SGW (question 4). Here it is assumed that a number of the students answering this survey are non-native English speakers. This assumption is made for two reasons, firstly, as noted previously, the student body is representative of 67 countries, not all of which are English-speaking. Secondly, findings reveal that over one quarter of the students who completed the baseline survey are studying two Language As (question 11). As explained previously, this indicates near-native level proficiency in two languages, with the most common combination being English and German, followed by Spanish and/or French. Indeed, one individual specifically comments on how helpful they find SGW for assisting their academic language learning in response to this question.

The proportion of positive perceptions noted on the teachers' baseline survey is almost identical to the students, with exactly 50% agreeing that a SGW approach is effective for improving academic language proficiency for ELLs. One teacher makes specific comment on the baseline survey on the advantages of SGW for ELLs' academic language uptake. These findings concur with existing literature identifying first hand the reported benefits

for LLs engaged in SGW interactions with native speakers (Brock & Raphael, 2005; Sugino, 1994).

However, two students share negative perceptions as a result of having to interact with ELLs in SGW settings. This sense of dislike, indicated by feelings of frustration bordering on intolerance, is based on ELLs reportedly ignoring advice, or requiring repeated clarification. There is no data from the teachers that explicitly records tensions in SGW interactions arising from dynamics between native English speakers and ELLs. However, it is noted that some teachers do comment on difficulties configuring groups due to tensions arising from differing proficiencies. It is assumed this could incorporate language proficiencies. Existing research acknowledges that diversity and difference can indeed result in conflict during the collaboration process (Lizzio & Wilson, 2005). Furthermore, this is consistent with other literature that discusses the impact of differing cultural perceptions about attributes such as dominance and subordinance, especially in the midst of dialogue exchanges (Brown, 2007; Webb, 1982).

Nonetheless, research contends that if time is put into supporting combined beliefs about the interpersonal context (Van den Bossche et al., 2006), as well as time for increased opportunities to practice SGW processes (Zawojewski et al., 2003) then team learning behaviour will be more likely to flourish. Literature also suggests that students with higher proficiencies in, for example, the English language, can actually extend their own learning through the process of helping others (Johnson et al., cited in ERC, 2013; Johnson & Johnson, 1999; Reid et al., 2002), a process which socio-cultural theorists refer to as developing the group ZPD (Nyikos & Hashimoto, 1997). There are most certainly ramifications arising from these findings that will be included in the following chapter.

A further factor believed to have a bearing on the context is related to policy transformation that occurred in the latter part of the researcher's time within the institution. This came as a directive from the overarching governing body of the school; the International Baccalaureate (IB). As with the discussion above, selected findings and

literature related to this policy change will be plucked out from the overall pool of data and interwoven with existing research where applicable.

The announcement of the policy change was released in a pre-publication document entitled 'Approaches to teaching and learning in the Diploma Programme' (IB, 2013). Parts of this document formed the basis of a substantial portion of staff development sessions for DP staff during the latter part of first semester of the 2015 academic year. One of the primary foci within this report was a call for greater alignment of the teaching and learning practices within the Diploma Programme (DP), with the Middle Years Programme (MYP) and Primary Years Programme (PYP) portions of the IB curriculum framework. This aspect of perceived value in adopting a more integrated approach to pedagogy is supported by existing research that calls for greater incorporation of collaboration (Savage, 2010; Hooley & Moore, 2005). Specifically, the IB (2013) encourages teachers within the DP portion of their schools to provide "explicit opportunities (…) for students to practice and develop their social and collaborative skills" (p. 8). Amongst the justifications put forward for this change in policy is the belief that "collaboration is a crucial way of constructing understanding and making meaning" (p. 8). Furthermore, one of the key affordances of collaborative activities noted by the IB is "they can be a catalyst to higher-order thinking" (p. 8).

Although the demonstration of higher order thinking skills is not a measurable factor of any of the data gathering instruments used in this study, it is noted in the students' exit slips findings that the item generating the most improved rating is students' perceptions of their peers' academic learning from one session to the next. In addition, two teachers on the teacher reflection survey note the improvement in understanding from one SGW session to the next. This could be interpreted as evidence that gains in knowledge, and therefore thinking, occurred. The assertion that a SGW approach incorporates the key value-added dimension of fostering higher order thinking skills is well supported in existing literature (Collier, 1985; Biggs & Tang, 2011; Verenikina, 2012). In addition, research supports the contention that a SGW is an effective means for maximising outcomes for all types of

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learners (Biggs & Tang, 2011; Bentley & Cazaly, 2015), as well as playing a valuable role in preparing students for how they will most likely be expected to function within the 21st century workplace (SCANS, cited in ERC, 2013; Zawojewski et al., 2003). Moreover, the findings that show perceived improvement in knowledge after repeated involvement in SGW echoes existing literature which suggests that increased opportunities for practice improves SGW outcomes (Zawojewski et al. 2003).

Another relevant aspect noted in the report is the stipulation of the role that DP teachers should play in fostering language growth. The report emphasises that in addition to being teachers of content, every DP teacher also has a role to play in "reinforcing students' language development" (2013, p. 29). As a consequence of this, the IB makes a further assertion that DP teachers need to understand how to harness this diversity, recommending they view it as "a potential resource for learning and develop every student's academic language" (p. 29).

The degree to which the teachers in this study perceive themselves to be language teachers as well as teachers of content is not directly sought. However, findings from the students' baseline survey show that over half are either unsure or hold negative perceptions towards SGW being an effective approach for acquiring academic language. Qualitative findings reveal that this perception is based on the belief that during SGW interactions they and their peers are not utilising academic language, and instead just use 'everyday language.' However, anecdotal comments gathered from Jill, the Maths teacher, and Anka, the German teacher, indicate that subject specific language is being taught, and is observed being utilised during SGW interactions. In order to heighten students' awareness of academic language use existing research proposes that students be given training in how to articulate their understandings (Blumenfeld et al., 1996), and that teachers make a point of highlighting key moments when target behaviour is exhibited (Tomlinson, 1999).

In addition to calls for DP teachers to incorporate more explicit language teaching into their repertoires, this report also advocates for a more student-centered approach to

teaching. For some teachers this may mean a significant change in role, moving from what McWilliam's (cited in IB, 2013) refers to as "'sage-on-the-stage' to [becoming a] 'guide-on-the-side'" (p. 20). As this aspect of policy shift is most closely linked to issues to do with the role of the teacher, discussion of this point will be continued in section 5.4, below.

A second document commissioned by the IB also calls for a policy shift towards greater collaboration (Education Research Center [ERC], 2013). This report presents a meta-analysis of 153 studies addressing various aspects of student collaboration across all three segments of the IB. Included in the report is the observation that aside from the IB's pre-publication report quoted above, it is noted there is "a general gap observed throughout the IB curriculum documents [as] even though collaboration is a clearly stated expectation, description of what collaboration is and why collaboration is chosen as an instructions goal is not stated" (ERC, 2013, p. 107). As a result, included amongst a number of recommendations is the following statement "In order for successful collaborative practices to truly take hold in all IB programmes, professional development within each programme area on the definition and practice of successful collaboration will be needed" (ERC, 2013, p. 133).

Explicit findings supporting a greater need for further professional development of their teachers is not apparent in data gathered from the students. However, the isolated references to teachers not knowing who students work best with, in terms of both social and academic aspects, plus not supplying sufficiently clear instructions, nor timely interventions to deal with conflict would seem to point towards extra training in these areas being advantageous. Interpretation of data from the teachers on the other hand, provides evidence that is rather more clearly linked to the issue of ongoing teacher training. It is noted on the baseline survey that just under one third of teachers feel only 'somewhat' confident in utilising a SGW approach. Moreover, one teacher specifically acknowledges the need for more training in the comment box, whilst others voice difficulties and hesitation over using the approach. There is evidence in the literature that supports the value of further teacher training in collaborative approaches, although in this instance it is

specifically in terms of a pedagogical shift towards more interdisciplinary collaboration (Savage, 2011; Hooley & Moore, 2005). It is worth noting that other research exists that sounds warnings about negative outcomes for learners if teacher training in SGW pedagogy is insufficient (Blumenfeld et al., 1996).

5.3 Perceptions and challenges

When reviewing the findings for RQ1 (perceptions) and RQ2 (challenges) it is apparent there is an overlap around issues to do with: social harmony/disharmony; academic harmony/disharmony; and task fit. Therefore, findings and literature that are connected to both the perceptions and challenges for each of these aspects will be interwoven.

The findings that do not crossover between RQ1 and RQ2 are: perceptions around the role that teacher management plays in SGW learning outcomes; the challenges presented by appealing to all students' individual approaches to learning; and the challenge presented by logistical factors, specifically time and space. As teacher management would appear to hold the 'solution' for resolving the challenges presented by differences in individuals' approaches to learning, the discussion about this aspect will be moved to section 5.4, with the discussion about logistical challenges occurring in section 5.3.4.

5.3.1 SGW and social dynamics

Findings reveal social dynamics are the most significant factor in determining whether students choose to engage in SGW or not. Both inter- and intra-personal components are found to play a role in determining whether students place value on a SGW approach. So, while some students engage on an inter- and/or intra-personal level due to enhanced opportunities to either make new friends, collaborate, feel less stressed, have more fun or be supported, others experience a variety of inter- and/or intra-personal feelings leading to disengagement, including being undervalued, impeded, stressed, frustrated or expressing downright dislike for the approach.

Similar polarities can be found in the literature. For example, working with friends has been found to enhance social outcomes (Fung, 2006); and lower stress (Kendall & Khuon, 2005); in particular for LLs (Zawojewski et al., 2003; Brock & Raphael, 2005; Sugino, 1994); as well as being perceived as more enjoyable because of the increased opportunities to communicate and share ideas without feeling embarrassed (Farrah, 2011). However, opposing findings have also been uncovered in the same contexts. For instance, feelings of lack of confidence in negotiating around cognitive conflict with unfamiliar peers (Fung, 2006); and students who feel more positively inclined towards competitive-type approaches, or, conversely, feel inhibited by SGW settings (Farrah, 2011). Social disharmony arising from pre-existing negative relationships (Slimani-Rolls, 2003) is a further example of corroborative research. Finally, feelings of outright dislike are supported in the literature that discusses the notion of 'group hate' (Sorenson, cited in Gunn, 2007).

Analysis of data gathered from the teacher participants reveals comparable findings about the impact of who is in the group. On the one hand, there are teachers that note social dynamics enhances learning because of the collaboration and teamwork opportunities it affords, as well as inculcating an important life skill. These beliefs are consistent with affordances put forward by a number of researchers (Collier, 1985; Johnson & Johnson 1999; ERC, 2013; Zawojewski et al., 2003). On the other hand, some teachers express disengagement with the approach due to the difficulties in configuring socially harmonious groups. This is in accordance with other research conducted in secondary school settings (López Hurtado & Viáfara González, 2007; Kutnick et al., 2005).

In common with the students, the negative effect of who is in the group is perceived to be the biggest barrier against the successful implementation of SGW by teachers. Three sources of tension are identified: between genders; 'clashes' with individuals' preferred approaches to learning; and the age of the participants, with one teacher expressing a clear dislike for implementing SGW activities with students in the MYP section of the school, as compared to students in the DP. While literature suggests potential barriers due to males'

preference for more competitive-type approaches compared to females (Farrah, 2007), it is speculated that a possible reason for the observed tensions between the genders in this context could also be attributed to pre-existing relationships outside the classroom, as found by Slimani-Rolls (2003). Existing research also acknowledges the negative impact of individuals' preferred learning styles on SGW engagement, specifically in terms of perceived level of challenge resulting either in increased anxiety, or lower motivation (Tomlinson, 1999). The connection between the age of participants and possible barriers to effective interactions has also been noted in the literature, with some researchers drawing teachers' attention to the increased inhibitions caused by puberty (Brown, 2007; Moran, 2013). However, an even more plausible reason for the lack of on task behaviour exhibited by younger students during SGW that one teacher comments on, is found in research that reveals younger participants may feel more secure with a higher level of direct instruction, as compared to more mature peers (Verenikina, 2012).

5.3.2 SGW and academic outcomes

In common with findings related to social dynamics, perceptions about academic outcomes are largely mirrored. On the one hand, the majority of students indicate positive perceptions towards SGW as it is seen as an effective mechanism for learning course content. These findings are based on beliefs to do with perceived equity in workload, motivation levels, and the value placed on working with peers with equivalent, or preferably higher, academic proficiency. This latter aspect is valued because of the potential to enhance grades. Conversely, findings show academic disharmony is more likely when there is a perceived inequity in workload distribution, motivational drive, and/or when academic proficiency levels of peers are perceived as being lower. Research echoes the contrastive findings around equity and motivation levels (Lizzio & Wilson, 2005), as well as the polarising effect of perceived proficiencies of peers (Farrah, 2011; Slimani-Rolls, 2003). The potential for higher proficiency team members to enhance grades would seem to point towards aspects to do with teacher management of groups, and as such will be discussed in section 5.4 below.

A finding that is not mirrored is that a number of students perceive SGW interactions enhance their retention of material, especially of academic language. Evidence of improved retention as a result of adopting a more active student-centered approach is found in literature that advocates a move away from a purely transmission style of teaching (Hattie, cited in Montague, 2014).

In addition to the factors leading to academic harmony commented on by the students, findings from the teachers also include a perception of increased ownership of the learning process. This is consistent with literature that suggests that SGW interactions have the potential to heighten students' accountability (Johnson & Johnson, 1999), and motivation levels (Collier, 1985). Some teachers, in common with a number of students, note SGW involvement also enhances the utilisation of subject-specific language, with specific benefits for ELLs, as already noted in section 5.2 above. This aspect of perceived value of SGW interactions for all learners, including LLs, is well-supported in the literature (Fung, 2006; Coyle, 2007), particularly those with socio-culturalist underpinnings who maintain that the group ZPD can be extended (Nyikos & Hashimoto, 1997; Mitchell et al., 2003, Alexander, 2006; Saville-Troike, 2006). Furthermore, for one teacher increased academic harmony is also felt to arise out of being able to use SGW as a formative assessment tool, as it assists her in identifying 'gaps' in learning. Support for this pedagogical practice is found in IB literature (IB, 2013).

On the other hand, in common with some of the students, a number of teachers perceive that academic disharmony arises due to the differences in proficiencies between classmates. The literature suggests that in order to minimise such tensions careful consideration of group configurations is necessary (Cohen, 1994; Tomlinson, 1999; Marzano et al., 2001; Reid et al., 2002; Blumenfeld et al., 1996). Because of the links to teacher management issues, a more in-depth discussion of this aspect will be carried over to section 5.4.

5.3.3 SGW and task fit

The extent to which a SGW approach fits with assessment tasks is an area that reveals significant division. On the one hand most participants in this study hold the perception that it is unfair to allocate a whole group grade, largely due to concerns about unequal contributions to the outcome. Existing research acknowledges this perception (Rodger, cited in Collier, 1985; Farrah, 2011). On the other hand, a number of students feel SGW is a useful mechanism for summative assessment, although it is noted this is attributed to interacting with peers that have equivalent or higher level proficiencies. Only one participant teacher, Petra, indicates engagement in the approach for assessment purposes, and that is primarily for logistical reasons, as she finds it quicker to implement and manage. However, a pedagogical rationale of students becoming accustomed to taking shared responsibility, is also given. This view is in accordance with existing literature that presents the same pedagogical justifications (Zawojewski et al., 2003; IB, 2013).

5.3.4 SGW and logistical factors

Findings to do with the impact of time and space are all perceptions that lead to either provisional or total disengagement from a SGW approach. A number of students feel the pace of SGW either slows learning down, or is too quick and therefore superficial. As these findings would seem to point towards the role that teachers can play in catering for students' different approaches to learning, discussion on this factor is moved to section 5.4 below. Findings from a number of the teachers indicate a perception that they feel 'time poor,' in terms of training in SGW, preparing for SGW sessions, and in the time it takes to deliver content via a SGW approach, all of which lead to varying degrees of disengagement with the approach. Teachers' experience of a paucity of time is documented in the literature (Slimani-Rolls, 2003), in particular because of timetable constraints (Kutnick et al., 2005). However, literature also suggests that if time in the schedule for teachers and students to have increased opportunities to engage in collaborative learning experiences is allocated, then greater satisfaction in outcomes will result for all (Zawojewski et al., 2003).

With regards to space, some students feel that working in areas other than regular classrooms is more likely to result in off-task behaviour because of being out of sight of the teachers, or is simply more challenging due to physical limitations within the space. Research suggests that if more time is put into strengthening team beliefs in outcomes (Van den Bossche et al., 2006), as well as repeated opportunities to practice (Zawojewski et al., 2003) this may go some way towards reducing the off-task behaviour. Lack of appropriate spaces to implement SGW is also commented on by teachers, particularly in the science rooms, due to the fixed furniture and benches in these spaces. Existing research acknowledges the constraints that can be caused by immovable furniture, particularly in science classrooms, but also notes that if teachers have the flexibility to move around furniture, positive outcomes can result (Kutnick et al., 2005). The challenges presented by physical limitations noted by both the students and the teachers would appear to have more to do with what the institution can provide in terms of resources, and as such discussion of this factor will be carried over to the next chapter.

5.4 The role of the teacher

Analysis of students' and teachers' perceptions regarding teacher management strategies once again reveals a polarity of viewpoints. On the one hand, students indicate a slightly higher preference for being given more autonomy in the midst of SGW implementation, specifically in being able to choose team members themselves. It is apparent by comments made in one of the teacher focus group meetings that at least one teacher, Anka, believes that more autonomy, and less in the way of scaffolding at this level is good practice for university. This perception is echoed in existing literature (Lizzio & Wilson, 2005). Conversely, other findings reveal that some students prefer that teachers determine group membership, with the proviso that it is done 'fairly' and because they place value on their teachers' abilities to gauge what the most productive combinations will be. As a number of teachers comment on the difficulties they have with configuring groups and/or observe within group tensions it is relevant to note there is a significant body of research that

discusses the impact of homogeneous groupings versus heterogeneous grouping, dependent on students' proficiency levels (Swing & Peterson; Hooper & Hannafin, cited in Cohen, 1994; Tomlinson, 1999; Marzano et al., 2001; Cohen, 1994, Reid et al., 2002; Blumenfeld et al., 1996; Tudge, cited in Cohen, 1994; Slimani-Rolls, 2003). Indeed, research supports the value of teachers being cognizant of their students' academic capabilities, as well as status within the class ahead of assigning teamwork (Tomlinson, 1999). A further recommendation in the research suggests that within group tensions can be alleviated by teachers supporting students in setting targets to turn any negative perceptions about SGW around (McMillan, 2001).

On the other hand, analysis of both quantitative and qualitative findings reveals that, overall, students have a greater preference for having increased input from their teachers. As well as support with dealing with within group tensions, and being provided with exemplars strengthening potential engagement, students also place value on a more scaffolded approach, such as afforded by providing checklists, checking in for understanding, and assigning roles within SGW teams. A number of these strategies are consistent with 'best practice' advice noted in the literature, for example: acknowledgement that collaboration does not happen automatically (Slimani-Rolls, 2003; Cohen, 1994); the value of scaffolding (Vernikina, 2012; van Lier, 2007, TAMU, 2016); timely intervention to check for understanding (Biggs, 2011, Reid et al., 2002); and consideration of role assignment (Reid et al., 2002; López Hurtado et al., 2007, Zawojewski et al., 2003). The implications of this lack of congruity in perspectives about the need for scaffolding and intervention will be carried over to the next chapter.

The teacher management strategy that leads to the strongest expressions of disengagement is related to the implementation of one form of SGW, where teams of peers are responsible for 'teaching' a portion of the content to their classmates. Some students perceive this approach to SGW results in gaps in their knowledge of both course content and subject-specific language, as well as negatively impacting on their grades. This seems to indicate a rather limited interpretation of how SGW can be operationalised within this context.

However, it is noted that a number of the participant teachers utilise SGW differently, as evidenced by the brainstorming task noted on Petra's reflection of episode one of SGW with her Biology class, the algebraic problem solving that occurred in Jill's Maths class, and the conversation practice in the midst of Anka's German class. Therefore it is assumed students are basing these perceptions on past experiences, as well as experiences in classes other than those of the participant teachers for this study. The literature presents alternatives for operationalising SGW, such as consideration of providing a number of 'entry points' to tasks (Tomlinson, 1999), whilst at the same time being conscious of maintaining a balance between collaborative, competitive and individualist-type tasks (Johnson & Johnson, 1999). The adoption of such strategies would appear to have the potential to enhance students' engagement as well as appeal to different approaches to learning, thereby maximising the chances of achieving higher grades. As a result this is a further facet to be carried over to the next chapter.

Finally, it is noted that findings from the teachers leading to disengagement with a SGW approach range from indications of helplessness in the midst of SGW implementation, to downright dislike for the approach. In terms of the former perception, research suggests that if teachers have a heightened sense of their own self-efficacy, and indeed competency, then positive perceptions are more likely to flourish (Tilton, 2014). Perceptions at the negative end of the spectrum have also been attributed to struggles with changing roles (Markee, cited in Lwin et al., 2012; Fransson et al., cited in Collier, 1985; van Lier, 2007) as teachers' may hold the perception that their primary function is to be more of a transmitter of knowledge, as opposed to a facilitator, or, as previously mentioned, "'sage-on-the-stage' [as opposed to] 'guide-on-the-side'" (McWilliams, cited in IB, 2013, p. 20). As this would seem to indicate a change in pedagogical perspective, this is a further issue to be carried over into the next chapter.

5.5 Summary

This discussion highlights points that arose out of probing into participants' perceptions

about SGW as a methodological approach, the perceived challenges of implementing such an approach and the management strategies that could be implemented to optimise outcomes, particularly, although not exclusively, for LLs within similar contexts. These points will be further highlighted in the following chapter do with conclusions, implications and recommendations.

Chapter 6 Conclusions

6.1 Introduction

This chapter draws this research project together by noting a number of significant conclusions drawn from the study. The conclusions have been divided into three key categories: contextual, pedagogical and methodological. As it is the researcher's contention that pedagogy can be informed by methodology, these last two categories are combined. The implications of each of these categories of conclusions is presented in turn, followed by suggested recommendations for enhancing the efficacy of SGW within similar teaching/learning contexts, as well as suggestions for further research. An outline of the limitations of this study follows, ahead of final concluding thoughts from the researcher.

6.2 Context

Based on findings about the number of students who are studying a 'Language A other than English,' it is concluded that a portion of the student body in this context are studying in a language that is not their mother tongue. The implications that arise from having learners whose L1 does not correspond with the prevailing language of instruction within such institutions are significant.

Findings reveal less than positive perceptions, bordering on intolerance, amongst the student body with regards to having to interact with peers who do not have English as their first language, which implies a degree of a lack of acceptance of diversity. As a result, it is recommended that such multilingual institutions place priority on fostering a climate of celebrating diversity, including putting in place policy that mandates training in intercultural understandings, in order to heighten both students' and teachers' awareness of issues related to cultural differences and acceptance. The researcher believes that heightening individuals' awareness of such issues would go some way to ensuring that more harmonious outcomes result during SGW engagement, particularly when it comes to negotiating through any cognitive conflict.

The findings also reveal a polarity in perceptions between the teachers and some students about the efficacy of SGW as an effective tool for academic language learning. This leads to the conclusion that there is a lack of consistency in the extent to which the teaching and learning of subject specific language occurs in different classes. This implies that ELLs are not being afforded equal opportunities across all curriculum areas for their language learning to flourish, a point that is disconcerting due to the previously mentioned policy that specialist ELA support for ELLs ceases in the DP sector of this context. The recommendation is that teachers be given further support in utilising practices and strategies that integrate language teaching and learning into SGW contexts, with the added codicil that ELA specialists be included as a resource in this regard. Research into how this recommendation could be actioned is a potential area for further study.

On a related note although not directly sought in any of the data gathering instruments used in this study, it is an established fact that like the students, the teachers in international schools typically represent a diverse range of cultures. It is observed that the DP teachers in this study are no exception. The conclusion that can be drawn from this observation is that the standard of pre-service training is not necessarily uniform as it takes place in a variety of global institutions.

The implication of this assumed lack of uniformity in teacher training is that there are no guarantees that it includes a specific focus on strategies for teaching within multilingual environments, such as afforded by a collaborative-style approach. In the study this assumption is borne out, firstly, by findings on both the teacher baseline survey and anecdotal comments in the teacher focus groups, where it is noted that a portion of teachers either report on feeling only 'somewhat' confident with a SGW approach, or directly state they feel they need more training in it. In addition, it is implied further training in SGW implementation is necessary due to the raft of findings that show the resultant social and academic disharmony both sets of participants report on having observed or experienced within this context.

Moreover, findings from some of the students reveal a high degree of dissatisfaction with one particular mode of operationalising SGW, where they are required to learn a portion of the content and 'teach' it to their peers. This would imply further evidence of a lack of training in SGW implementation, specifically in the assortment of ways SGW can be tailored and implemented, dependent on individuals' approaches to learning, and on the desired learning outcomes.

The implications of these findings leads to the recommendation that teachers' knowledge and expertise in the area of SGW implementation within such contexts be established from the outset. This is because on the one hand, prior knowledge may prove to be a valuable asset in terms of providing mentoring support for colleagues; whilst on the other hand, gaps in SGW pedagogy may exist. This latter situation could present an opportunity for greater collaboration between peers and/or point to the need for institutions to provide ongoing training. This is yet another area for further research.

Finally, evidence of barriers to SGW usage created by the twin logistical constraints created by lack of time and appropriate spaces would also indicate the need for recommendations for change at an institutional level. These could include policy changes that support designated time in the DP curriculum in order to consolidate skills in SGW interactions and management, time for faculty to collaborate with peers both within and across subject areas (including ELA specialists), as well as consideration and resources being put into purpose-built spaces (including the flexibility to move previously fixed items of furniture around) to more easily accommodate SGW interactions.

6.3 Pedagogy and methodology

Findings that show a polarity of perspectives between different groups of the participants have significant pedagogical implications. The first such duality is uncovered in the data revealing perceptions about the value being placed on a SGW approach as a tool for

summative assessment purposes, with only a small portion of students and just one teacher holding positive perceptions. Another interesting observation has to do with the value most students place on being provided with scaffolding and timely interventions in the midst of SGW activities, as compared to a small number of teachers who express a belief in fostering more independence during SGW engagement by letting students 'work it out for themselves'.

It is concluded that students' experience of these two aspects of SGW implementation and management varies from class to class, dependent on their teachers' pedagogical stance on each issue. Both these findings imply evidence of the gap noted in the literature in the introduction to this study, namely the under-utilisation of students' perceptions as a resource for informing pedagogy. Therefore, it is recommended that there be more active collaboration between teachers and students over SGW learning processes and outcomes, such as afforded by the methodology of an EP approach.

Furthermore, it is contended that by involving students in discussions to do with the pedagogical underpinnings for, firstly, utilising a SGW approach for assessment purposes (including the rationale that it is good training for what they will encounter in the workplace) as well as taking on board their preference for more teacher-direction during SGW activities, that this will lead to an improvement in harmonious learning outcomes, as well as general classroom climate. Once again, this is an area for further research.

To summarise, the researcher would like to conclude with the following key assertion:

> If there is sufficient institutional investment into logistical aspects, namely designated **time** for staff training and collaboration on the how/when/why of SGW pedagogy; and more time for SGW teaching within the timetable; as well as optimal physical **space** for both activities, then the social and academic outcomes for the student body will be optimised.

6.4 Limitations of the study

A primarily 'between subjects' design was implemented due to the fact that participation was invited across all curriculum areas in the DP sector. The reader is reminded that the six participant teachers who subsequently volunteered are representative of five different curriculum areas, namely: Biology; Chemistry; Physics; Mathematics; and German, with the former being the only curriculum area that had two teachers contributing to the findings. The difficulty with such an approach according to Wilson and Fowler (2005) is that "interpretation of differences may be potentially confounded by any naturally occurring variations between the group of students" whereas a within-subject design "allows valid comment on the relative stability of learning approaches" (p. 91). However, it is noted that the bulk of the disciplines were in the Sciences, as opposed to the Arts, so it could be argued that the design met the criteria of within-subject design, at least partially.

On the other hand, the dominance of the Sciences could equally be perceived as a limitation. This arises as a result of the small size of the sample group of participants, so the data gathered is appropriate for the scale of this project. However, as the researcher feels being able to compare teachers' and students' perceptions of SGW across a wider range of subjects could have enhanced the validity and reliability of the findings, in terms of an examination of consistency in pedagogy irrespective of curriculum area, this could be a fruitful area for larger scale follow-up research.

Although the researcher determined that a 'soft' EP approach to data gathering was most suitable for the present study, for ethical reasons and also in terms of the focus being on action for understanding, as opposed to action for change, it is clear there may have been limitations created by this decision. By electing not to be present during the SGW implementation phases, the outcome was the researcher had to interpret the reflective perceptions that teachers and students gave on their respective reflection surveys and exit slips. Moreover, the interpretation of exactly what was done during the SGW activities wasn't clear in all cases. This was due to some teachers not providing a detailed description on the reflective surveys. It is believed this is yet another fruitful area for

follow-up research.

It is felt that the restrictions caused by the limited time the researcher had remaining in the context markedly reduced the scope of any data gathering. That is to say the research design was, of necessity, curtailed and precluded more detailed follow up. For example, it would have been ideal to have been able to gather post SGW-implementation data from a larger segment of the student body, rather than being confined to the perspectives of the three students who volunteered for the focus group phase. Moreover, as there were only three student volunteers there was no possibility of gaining representative views from each of the six participant teachers' classes. Obtaining a larger sample size from which to gather data would seem to be another area inviting follow-up research. Also as there was only one opportunity with each of the teachers and students to probe more deeply into insights, as afforded by the focus group meetings, the researcher made the decision to focus on interpretive responses to what their peers and the students had recorded on their baseline surveys, rather than probing more deeply into their individual responses on their respective reflection surveys and exit slips. If time had allowed, more richness of individuals' perceptions could have been gathered. Therefore it is contended that a longer data gathering phase could yield worthwhile insights in any follow-up research.

Arguably, a further limitation could be seen to arise from the lack of gender balance amongst both sets of focus group participants, as there was only one male volunteer in this phase. Interestingly, as the literature reveals that males have a tendency to prefer competitive-type activities as opposed to collaborative ones it is perhaps not surprising that the representation was unbalanced. However, it would have been useful to have at least one male's perspective in the student focus group meeting, for comparative purposes. It is believed this is a further area calling for follow-up research.

Finally, the demographic and contextual characteristics represented in this study were unique to this setting and findings may not be generalisable to other geographic regions and teaching settings.

6.5 Concluding thoughts

It is the researcher's belief that greater collaboration is needed at every level of the education sector. Firstly, increased collaboration between institutions and their educators is needed in order to provide sufficient time and space for successful SGW implementation to occur. Increased collaboration is also needed between teaching colleagues in order to share ideas and provide support, and where there are LLs this should incorporate language specialists, such as ELA teachers. Finally, and most significantly for this report, increased collaboration is needed between teachers and their students in the form of a methodology that makes greater use of an EP approach. This is in order to actively involve students in the development of sound SGW pedagogy. All of this is essential in order to maximise the teaching and learning outcomes that SGW potentially affords.

It is hoped that the insights this research project has shed on the perceptions of students and teachers involved in preparing for the shift into higher education and workplace contexts will contribute to the ongoing development of the teaching and learning practices that exist within IB-accredited international schools and similar settings.

To sum up, the researcher believes Dean and Marzano (2012, p. 46) explain the value of a collaborative approach rather compellingly when they state:

> *We can no longer expect students to learn in isolation any more than we can expect to work in isolation.*

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Appendices

Appendix 1 *Allwright's three processes of teacher development*
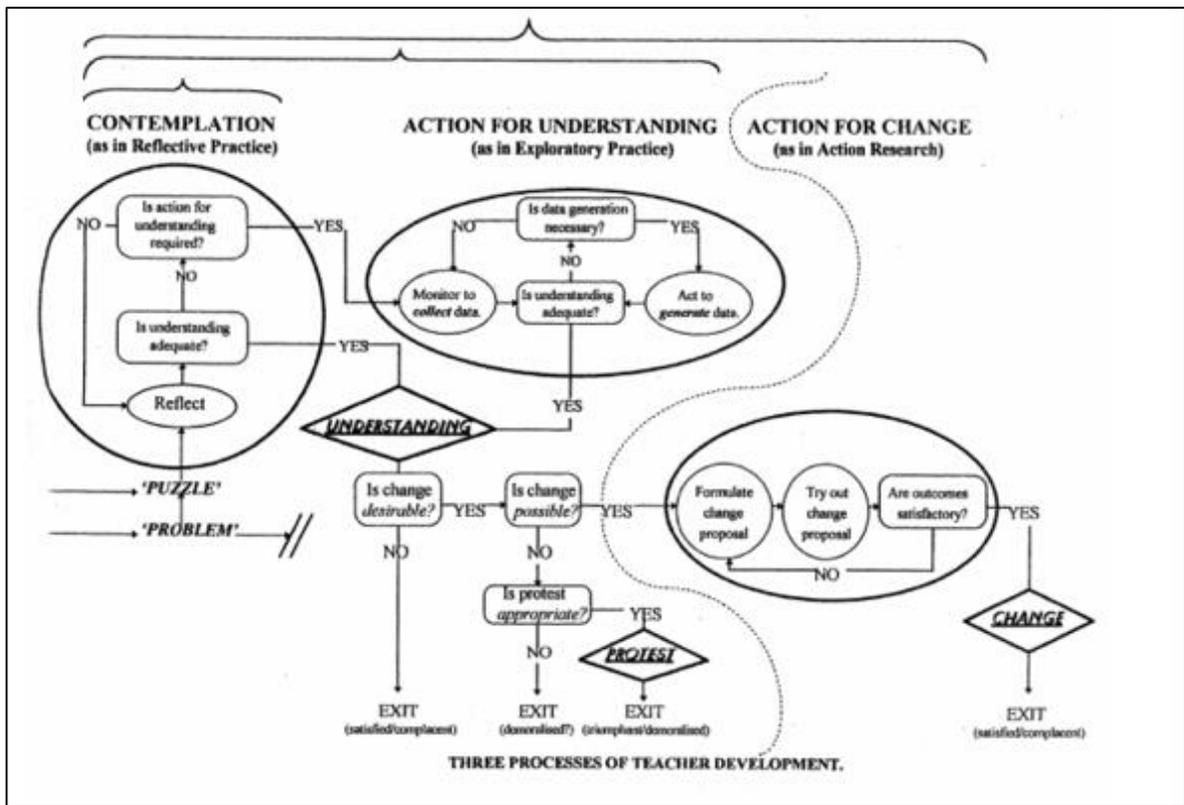
THREE PROCESSES OF TEACHER DEVELOPMENT.

DATA GATHERING INSTRUMENTS	**Q1.** What are students' and teachers' **perceptions** of SGW learning and teaching as an approach to gaining access to grade level curriculum in a multilingual school environment?		**Q2.** What are the current **challenges** of SGW learning and teaching experiences, for the students and teachers, and how can these be overcome in order to support ELL?		**Q3.** What **strategies** can be used to help teachers design and implement effective SGW learning experiences?	
	Direct	Indirect	Direct	Indirect	Direct	Indirect
Students' baseline survey	✓ Q3, 4 and 5	✓ Q1 and 2	✓ Q10	✓ Q1, 2 and 3	✓ Q7	✓ Q6, 8 and 9
Teachers' baseline survey	✓ Q1, 3, 4, 5 and 7	✓ Q2	✓ Q6	✓ Q2		✓ Q1, 2, 3, 4, 5, 6, 7
Students' exit slips	✓ Q2 and 4	✓ Q1, 3 and 5				
Teachers' reflection survey	✓ Q9	✓ Q5, 8 and 10	✓ Q6 and 7	✓ Q8, 9 and 10	✓ Q2, 3, 4	✓ Q5, 8, 9 and 10
Students' focus group	✓	✓	✓	✓	✓	✓
Teachers' focus group	✓	✓	✓	✓	✓	✓

N.B – as the format of the focus groups were semi-structured, I have elected to tick both the 'Direct' and 'Indirect' boxes above for each research question, as there were opportunities, to a lesser or greater degree, to address each of the research questions, albeit anecdotally, throughout all three of the focus group meetings.

Q1 Do you like learning in SGW situations?
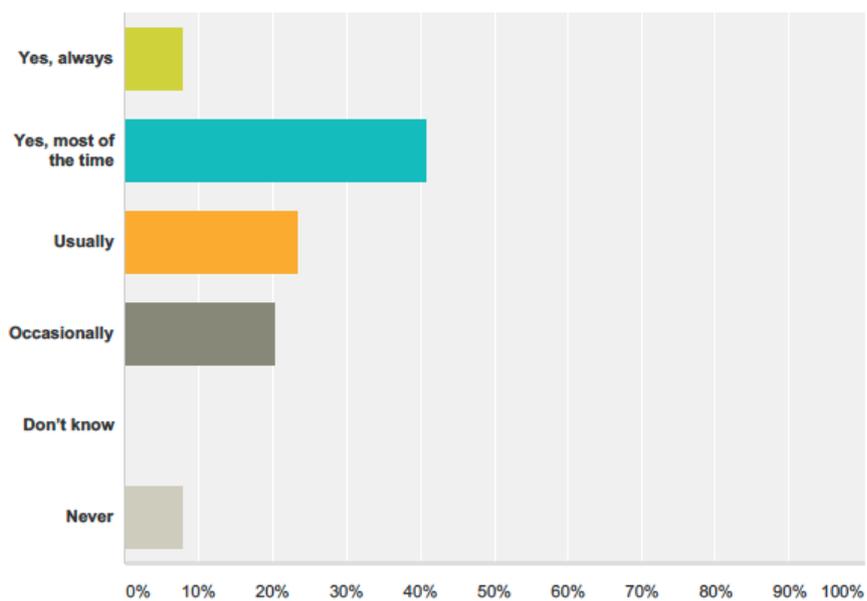
Answered: 64   Skipped: 0

Answer Choices	Responses	
Yes, always	7.81%	5
Yes, most of the time	40.63%	26
Usually	23.44%	15
Occasionally	20.31%	13
Don't know	0.00%	0
Never	7.81%	5
Total		**64**

Q2 I am interested in what influences how you feel about participating in SGW learning experiences, so please complete this sentence: 'How I feel about participating in SGW depends on...' (please choose up to a maximum of four, that is, feel free to choose between 0-4 responses from those listed below)

Answered: 64   Skipped: 0
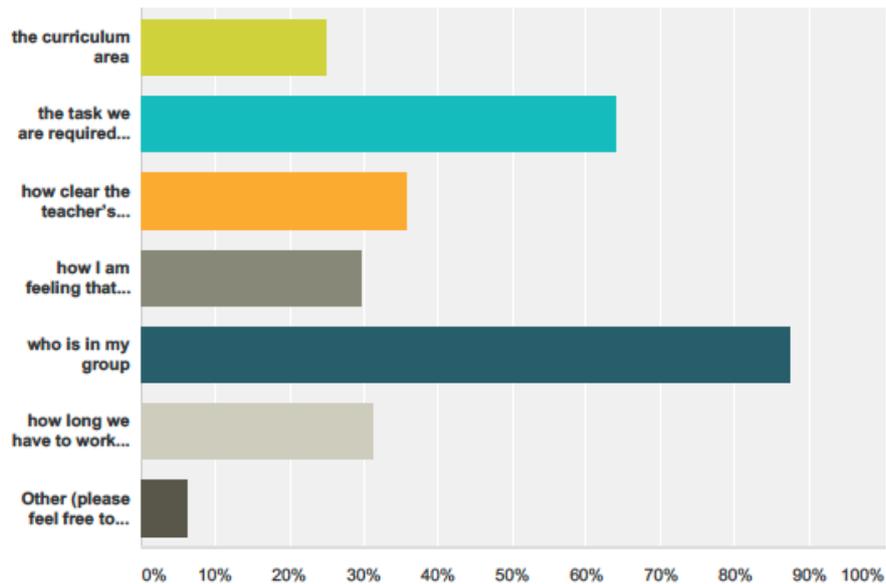
Answer Choices	Responses	
the curriculum area	25.00%	16
the task we are required to do during the SGW	64.06%	41
how clear the teacher's instructions are	35.94%	23
how I am feeling that day	29.69%	19
who is in my group	87.50%	56
how long we have to work on the task	31.25%	20
Other (please feel free to explain your answer in the comment box, below)	6.25%	4
Total Respondents: 64		

Q3 Do you think SGW helps you learn course content more effectively than working on your own?

Answered: 64   Skipped: 0
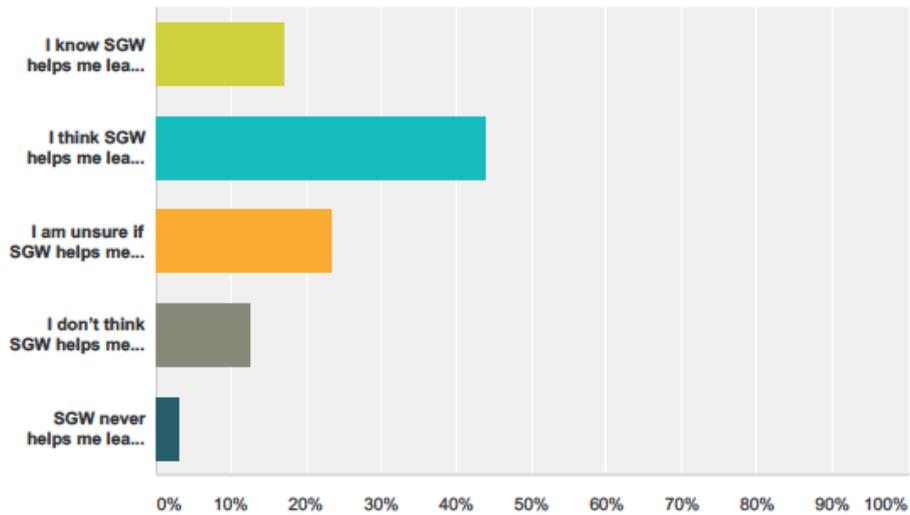
Answer Choices	Responses	
I know SGW helps me learn course content	17.19%	11
I think SGW helps me learn course content sometimes	43.75%	28
I am unsure if SGW helps me learn course content	23.44%	15
I don't think SGW helps me learn course content	12.50%	8
SGW never helps me learn course content	3.13%	2
Total		**64**

Q4 Do you think SGW learning experiences help you learn the academic language required for all your subjects?

Answered: 63   Skipped: 1
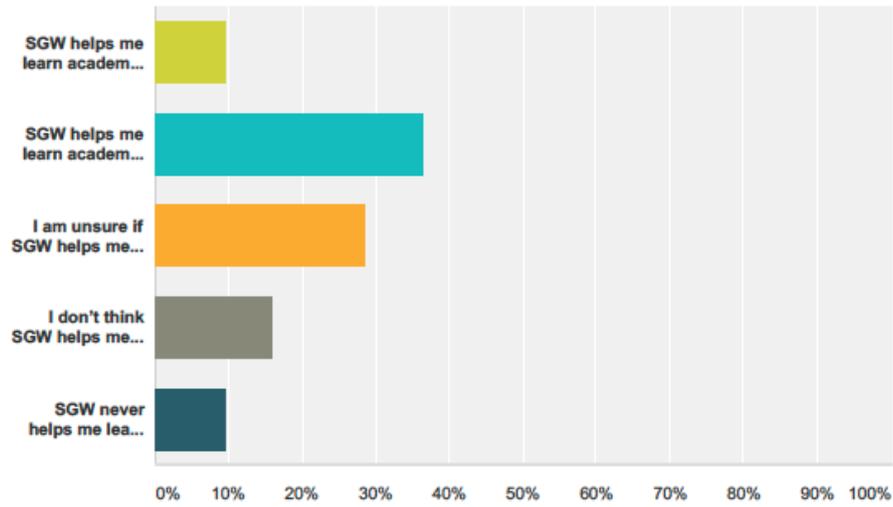
Answer Choices	Responses	
SGW helps me learn academic language	9.52%	6
SGW helps me learn academic language sometimes	36.51%	23
I am unsure if SGW helps me learn academic language	28.57%	18
I don't think SGW helps me learn academic language	15.87%	10
SGW never helps me learn academic language	9.52%	6
Total		63

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Q5 When you think about summative assessments in the past (with 'summative assessments' being those that are reported on in your grade cards), can you think of a time when SGW has helped you get a higher grade?

Answered: 63   Skipped: 1
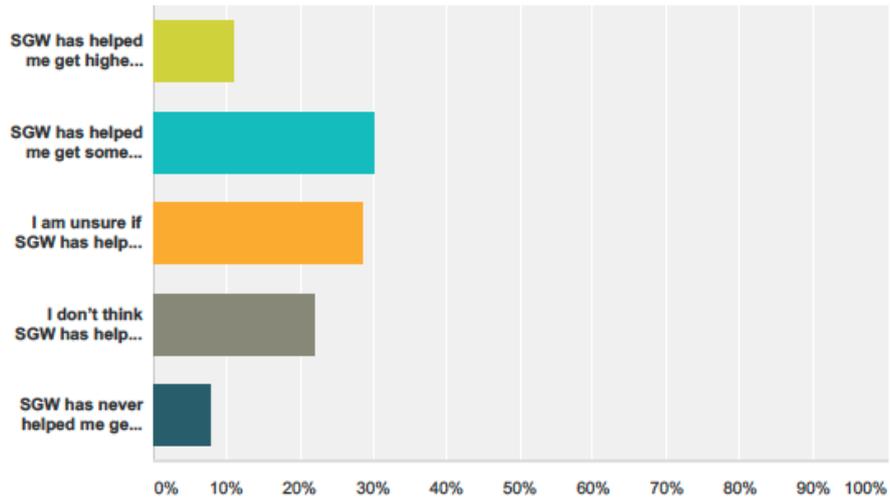
Answer Choices	Responses	
SGW has helped me get higher summative assessment grades	11.11%	7
SGW has helped me get some higher summative assessment grades	30.16%	19
I am unsure if SGW has helped me get higher summative assessment grades	28.57%	18
I don't think SGW has helped me get higher summative assessment grades	22.22%	14
SGW has never helped me get higher summative assessment grades	7.94%	5
Total		63

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Q6 How do you think the members in SGW settings should be decided?

Answered: 63 Skipped: 1
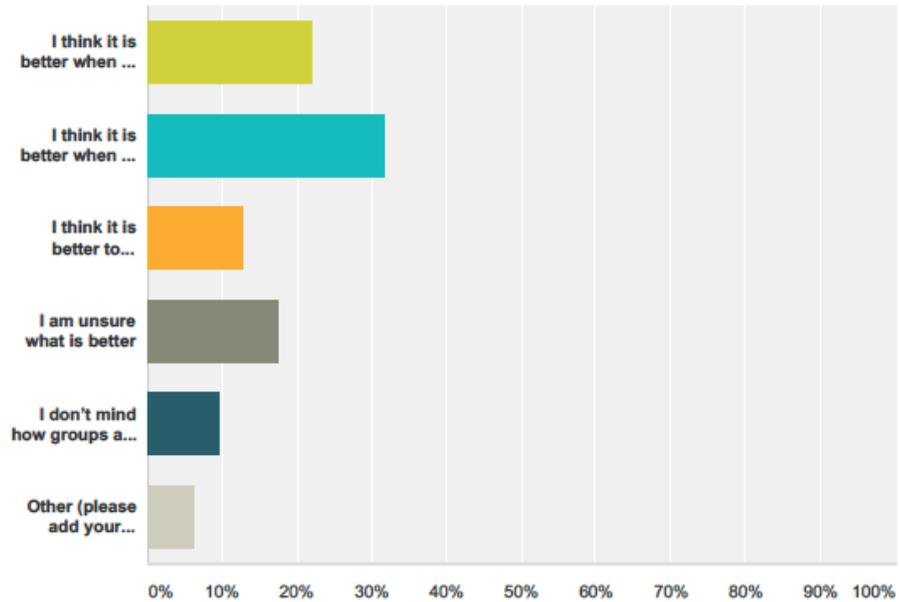
Answer Choices	Responses	
I think it is better when a teacher decides who is in each small group	22.22%	14
I think it is better when the students decide who they work in small groups with	31.75%	20
I think it is better to decide group membership randomly, for example, numbering off	12.70%	8
I am unsure what is better	17.46%	11
I don't mind how groups are decided	9.52%	6
Other (please add your comments in the box, below)	6.35%	4
Total		63

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Q7 Which of the following strategies do you think TEACHERS could use to make SGW activities more effective learning experiences? (please choose up to a maximum of four, that is, feel free to choose between 0-4 responses from those listed below):

Answered: 64   Skipped: 0
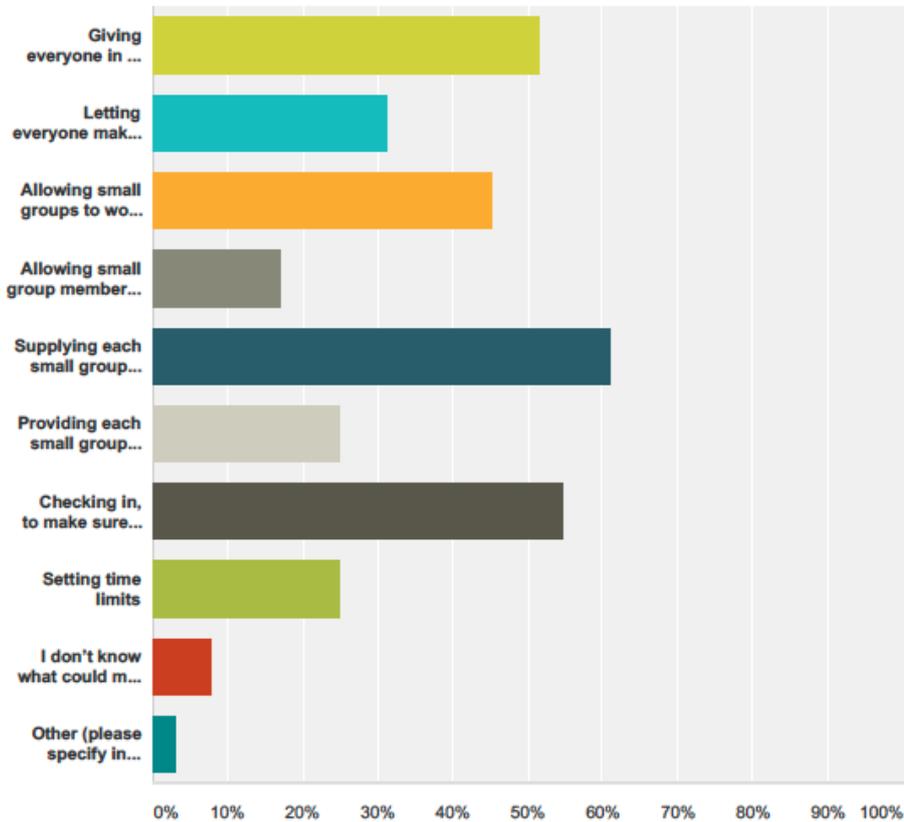
Answer Choices		Responses	
Giving everyone in the small group a specific role		51.56%	33
Letting everyone make their own notes before joining a small group		31.25%	20
Allowing small groups to work in other spaces (e.g outside of the classroom)		45.31%	29
Allowing small group members to speak in their mother tongue		17.19%	11
Supplying each small group with a checklist/written instructions		60.94%	39
Providing each small group with keywords/phrases		25.00%	16
Checking in, to make sure everyone understands the task before beginning the SGW		54.69%	35
Setting time limits		25.00%	16
I don't know what could make SGW more effective		7.81%	5
Other (please specify in comments box, below)		3.13%	2
Total Respondents: 64			

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Q8 Which of the following strategies do you think STUDENTS could use to make SGW activities more effective learning experiences? (please choose up to a maximum of four, that is, feel free to choose between 0-4 responses from those listed below):

Answered: 62   Skipped: 2
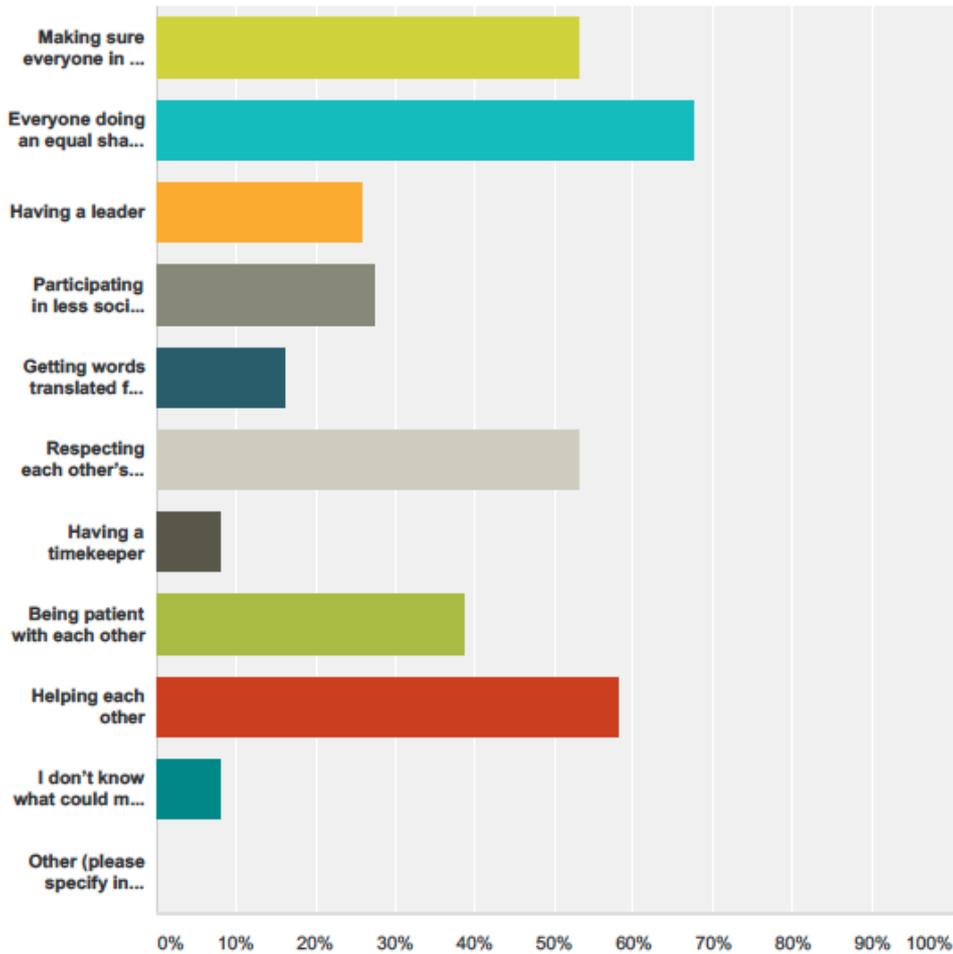
Getting words translated for group members if necessary	16.13%	10
Respecting each other's opinion	53.23%	33
Having a timekeeper	8.06%	5
Being patient with each other	38.71%	24
Helping each other	58.06%	36
I don't know what could make SGW more effective	8.06%	5
Other (please specify in comments box, below)	0.00%	0
Total Respondents: 62		

Answer Choices	Responses	
Making sure everyone in the small group has a specific role	53.23%	33
Everyone doing an equal share of the work	67.74%	42
Having a leader	25.81%	16
Participating in less social chatter	27.42%	17

Q9 Please feel free to add other comments about any POSITIVE experiences or thoughts you have about SGW learning experiences that have not been covered above.

Answered: 18   Skipped: 46

Q10 Please feel free to add other comments about any BARRIERS or CHALLENGES you have about SGW learning experiences that have not been covered above.

Answered: 16   Skipped: 48

Q11 Please could you indicate what languages you are studying, from the choices below, for example: Lang A = Spanish and Lang B = English

Answered: 60   Skipped: 4
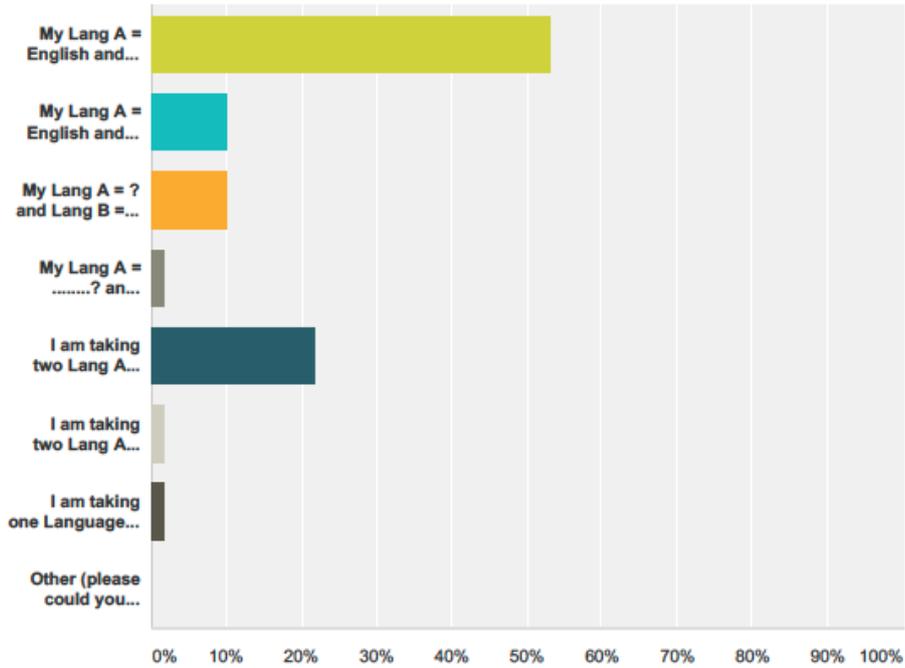
Answer Choices	Responses	
My Lang A = English and Lang B = German	53.33%	32
My Lang A = English and Lang B = ? (please could you specify in the comment box, below)	10.00%	6
My Lang A = ? and Lang B = English (please could you specify in the comments box, below)	10.00%	6
My Lang A = ...? and Lang B =.....? (please could you specify in the comment box, below)	1.67%	1
I am taking two Lang A courses (please could you specify in the comment box, below)	21.67%	13
I am taking two Lang A courses and one Lang B (please could you specify in the comment box, below)	1.67%	1
I am taking one Language A course and two Language B courses (please could you specify in the comment box, below)	1.67%	1
Other (please could you specify in the comment box, below	0.00%	0
Total		60

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Q12 Finally, would you be interested in receiving more information about participating in the follow up phase of this research about SGW? (which is an option to participate in an interview OR focus group with peers)

Answered: 63   Skipped: 1
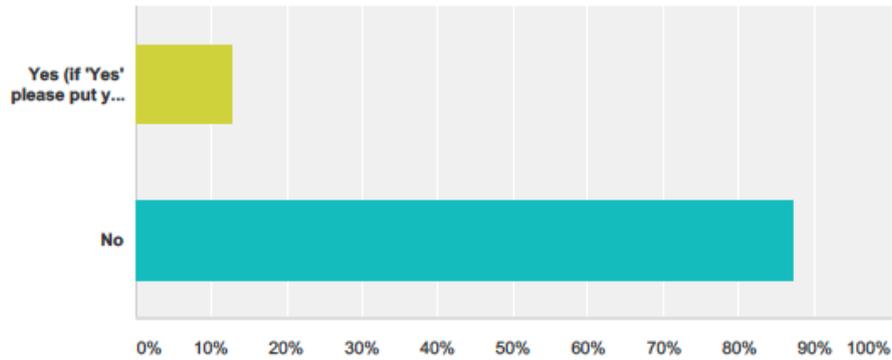
| Answer Choices	Responses	
Yes (if 'Yes' please put your name and email address in comments box below)	12.70%	8
No	87.30%	55
Total		63

Q1 How confident do you feel about using a SGW approach in your teaching?

Answered: 16   Skipped: 0
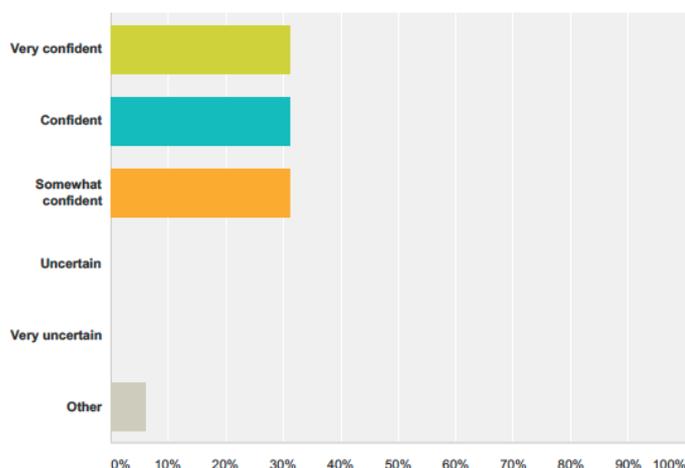
Answer Choices	Responses	
Very confident	31.25%	5
Confident	31.25%	5
Somewhat confident	31.25%	5
Uncertain	0.00%	0
Very uncertain	0.00%	0
Other	6.25%	1
Total		**16**

#	Please feel free to explain the reason for your selection in the comment box, below	Date
1	In foreign language teaching there is always the risk that students will not use the target language when speaking together. Sessions are often shorter than 20 minutes.	10/7/2014 10:14 AM
2	Often used, beneficial outcome.	10/7/2014 8:42 AM
3	I rarely use this approach, because the students relax into English at the first opportunity, rather than using the target language.	9/24/2014 9:09 PM
4	There is hesitation in doing SGW because of the varied levels of interest and motivation. With smaller classes and a smaller number of groups this is more manageable but with larger classes, the management is more difficult.	9/22/2014 10:52 AM
5	I have built up a good rapport with students to try this.	9/22/2014 10:30 AM
6	I am just planning a unit where groups of 3 students will be given a section of a topic to research and plan a lesson on. Each group will prepare a section of the topic. They will then use whatever strategy they see fit to 'teach' their section to the rest of the class. The other groups will do likewise. I will facilitate and supply the students with all my resources. The class will do a test on the topic afterwards and I will analyse results data comparing them to another class studying the same topic but in the traditional taught by me way. looking forward to seeing the outcome. First time I am trying SGW in this way	9/17/2014 7:57 PM
7	Would like to implement this more within my teaching. Pair work is very common but not as often bigger than groups of three - so that could improve.	9/15/2014 9:52 PM

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Q2 When you think about your use of SGW in the past, how frequently would you use it within the course of the year, for any given class?

Answered: 16   Skipped: 0
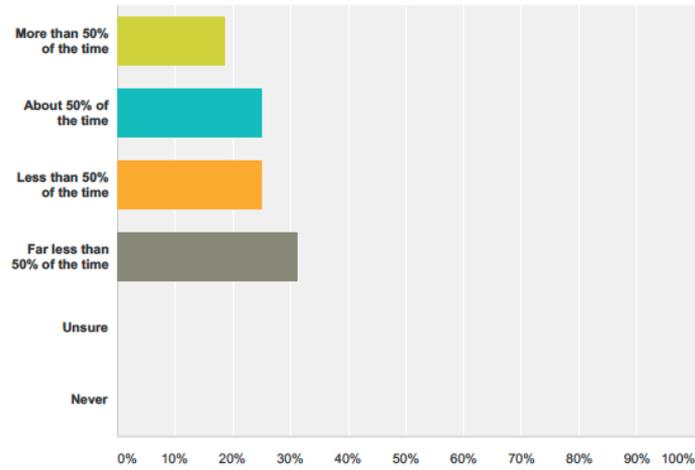
Answer Choices	Responses	
More than 50% of the time	18.75%	3
About 50% of the time	25.00%	4
Less than 50% of the time	25.00%	4
Far less than 50% of the time	31.25%	5
Unsure	0.00%	0
Never	0.00%	0
Total		16

#	Please feel free to explain the reason for your selection in the comment box, below	Date
1	Depends on the subject matter and its suitability for SGW.	9/22/2014 10:52 AM
2	There are certain aspects of the course that lend itself to group work	9/22/2014 10:30 AM
3	Not often and then perhaps for discussing a topic or working collaboratively on worksheets or research from time to time	9/17/2014 7:57 PM
4	For DP classes I tend to to this less.	9/16/2014 12:36 PM
5	seats are set in paris and groups of three and are difficult to move around to more than that.	9/15/2014 9:52 PM

Q3 How do you perceive SGW use as an approach for improving all students' learning of course content?

Answered: 16   Skipped: 0
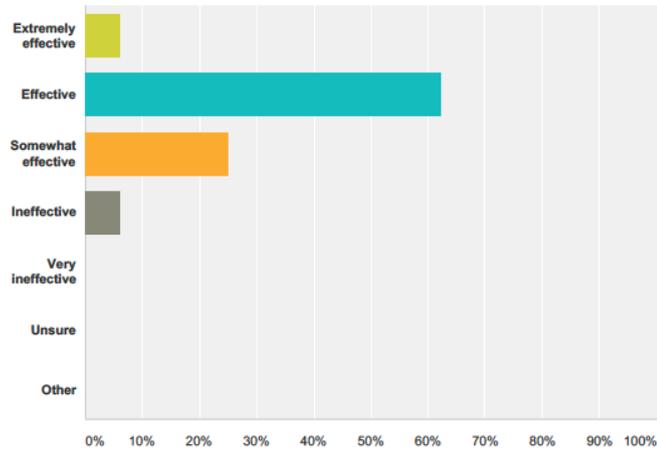
Answer Choices	Responses	
Extremely effective	6.25%	1
Effective	62.50%	10
Somewhat effective	25.00%	4
Ineffective	6.25%	1
Very ineffective	0.00%	0
Unsure	0.00%	0
Other	0.00%	0
Total		16

#	Please feel free to explain the reason for your selection in the comment box, below	Date
1	It gives students the opportunity to speak th language without having to talk to the whole class. It gives students the opportunity to work in teams and build relationships.	10/7/2014 10:14 AM
2	Some pupils benefit from their peers and their point of views, although some prefer teacher led activities.	9/22/2014 10:30 AM
3	If well planned. Sometimes, I have had the feeling especially in research that not all members get to participate fully and can get through a group activity without understanding anything. Therefore a method to evaluate what has been learned is vital and plenty of planning of the activity also	9/17/2014 7:57 PM
4	It depends on the students that are working together. sometimes certain people work best on their own.	9/15/2014 9:52 PM
5	Some students just get on with it, others enjoy a laugh instead.	9/15/2014 4:25 PM

Q4 How do you perceive SGW use as an approach for improving academic language proficiency for ELL?

Answered: 16   Skipped: 0
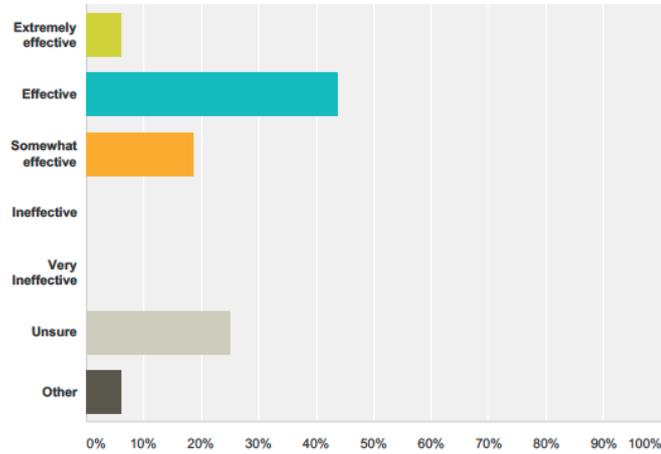
Answer Choices	Responses	
Extremely effective	6.25%	1
Effective	43.75%	7
Somewhat effective	18.75%	3
Ineffective	0.00%	0
Very Ineffective	0.00%	0
Unsure	25.00%	4
Other	6.25%	1
Total		16

#	Please feel free to explain the reason for your selection in the comment box, below	Date
1	In foreign language teaching I do not usually use groups to teach and learn academic labnguage.	10/7/2014 10:14 AM
2	Can only be effective if they have no other common language	9/24/2014 9:09 PM
3	works well depending on the level of their language proficiency as the person working with them would have to be very patient.	9/15/2014 9:52 PM
4	I would usually have another student explain to an ELL what they need to know.	9/15/2014 4:25 PM

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Q5 In your opinion, what are the most useful aspects/outcomes of taking a SGW approach to teaching and learning (please select up to a maximum of four from the following statements, that is, feel free to choose between 0-4 responses from those listed below):

Answered: 16   Skipped: 0
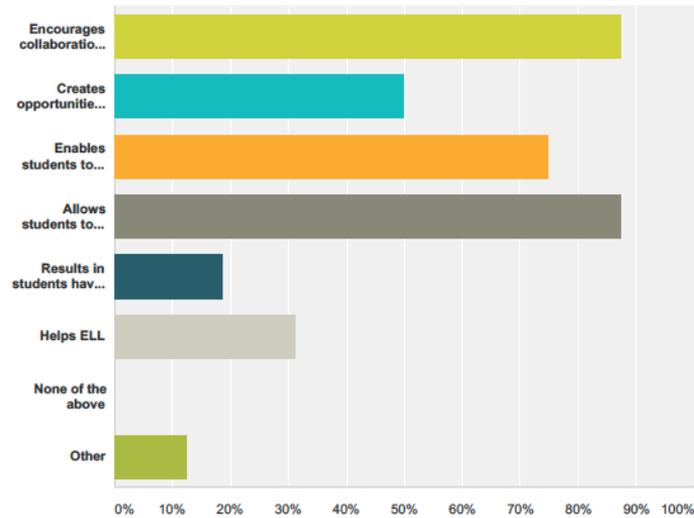
Answer Choices	Responses	
Encourages collaboration between students	87.50%	14
Creates opportunities for students to become individually accountable while achieving group goals	50.00%	8
Enables students to support and assist one another's success through face-to-face interactions	75.00%	12
Allows students to develop social skills by cooperating and working together effectively	87.50%	14
Results in students having the opportunity to reflect on the effectiveness of working together	18.75%	3
Helps ELL	31.25%	5
None of the above	0.00%	0
Other	12.50%	2
Total Respondents: 16		

#	Please feel free to explain the reason for your selection in the comment box, below	Date
1	Gives students the opportunity to speak the target language more.	10/7/2014 10:14 AM
2	Actually all of the above except none of the above of course	9/17/2014 7:57 PM
3	I think that ELL benefit from working in groups as it would often be very difficult for them to do a task on their own. Being able to explain your knowledge to others is a high level of understanding.	9/15/2014 9:52 PM
4	Ownership of learning	9/15/2014 4:25 PM

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Q6 In your opinion, what are the challenges/barriers to taking a SGW approach to teaching and learning? (please select up to a maximum of four from the following statements, that is, feel free to choose between 0-4 responses from those listed below):

Answered: 16   Skipped: 0
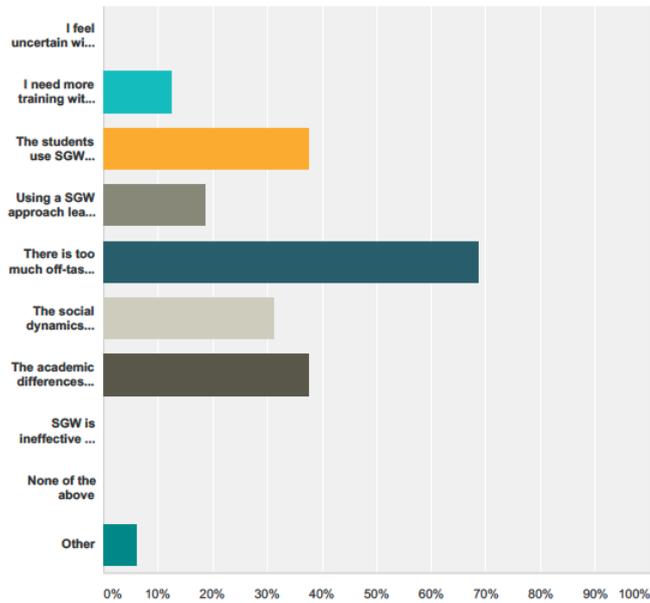
Answer Choices	Responses	
I feel uncertain with using a SGW approach	0.00%	0
I need more training with using a SGW approach	12.50%	2
The students use SGW opportunities ineffectively	37.50%	6
Using a SGW approach leaves insufficient time for independent student practice of the skills and processes they must master	18.75%	3
There is too much off-task talking during SGW sessions	68.75%	11
The social dynamics between students makes it difficult to configure SGW (e.g male and female combinations)	31.25%	5
The academic differences between students makes it difficult to configure SGW (e.g high ability vs lower proficiency)	37.50%	6
SGW is ineffective for ELL	0.00%	0
None of the above	0.00%	0
Other	6.25%	1
Total Respondents: 16		

#	Please feel free to explain the reason for your selection in the comment box, below	Date
1	In relatively small classes I am usually able to control off task talking and use of English.	10/7/2014 10:14 AM
2	Off task talking can be a problm but there the teacher needs to work effectively as a facilitator	9/17/2014 7:57 PM
3	This happens occassionally, depending on the cohort you happen to have in front of you and that depends on the quality of the yeargroup which changes from year to year.	9/16/2014 9:10 AM
4	SGW activities must be clearly related to the concepts / skills being taught and explored for it to be successful. Such a relationship ensures student motivation!	9/16/2014 7:04 AM
5	As the students age/interest increases their ability to work in groups while staying on task I think also increases. I always feel I need more training.	9/15/2014 9:52 PM

Q7 Are there any other comments you would like to make about your perceptions and use of SGW learning experiences?

Answered: 13 Skipped: 3
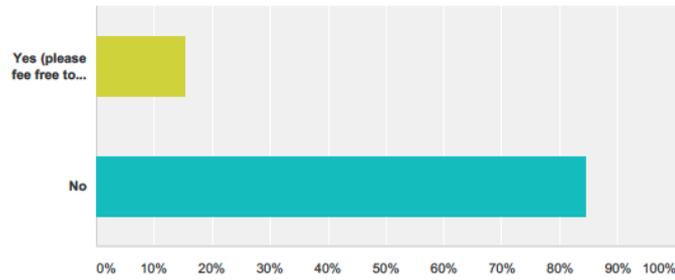
Answer Choices	Responses	
Yes (please fee free to elaborate in the comment box, below)	15.38%	2
No	84.62%	11
Total		13

#	Comment	Date
1	I am excited about exploring this approach more in my teaching. Training would be helpful but I will try a it out in the areas where I feel it will be useful. I am hoping that it will promote more ownership of the learning for the students. Lets wait and see	9/17/2014 7:57 PM
2	From an athletic background I see great value in the idea of team and working together to achieve a common goal. Working in groups or with others is an important life skill as well.	9/15/2014 9:52 PM

Q8 Would you be interested in participating in the follow-up phases of this research?

Answered: 16 Skipped: 0
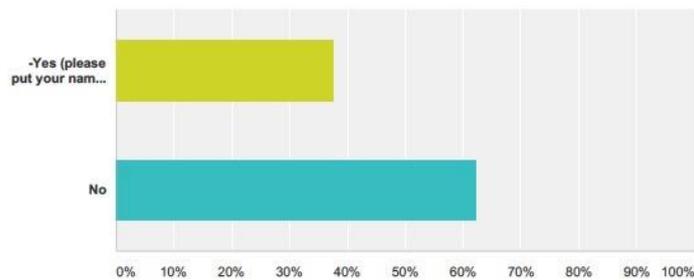
Answer Choices	Responses	
-Yes (please put your name and email address in the comment box, below)	37.50%	6
No	62.50%	10
Total		16

#	Contact details (name and email)	Date
1		10/7/2014 8:42 AM
2		9/17/2014 10:12 PM
3		9/17/2014 7:57 PM
4		9/16/2014 12:36 PM
5		9/15/2014 9:52 PM
6		9/15/2014 4:25 PM

Note: In the table above individual email addresses have been obscured.

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Please rate your small group work (SGW)learning experience today, using the following scale (circle **one** response per question):

a. How do you rate **<u>your</u> participation** in today's SGW learning experience?

   = none   **2 = very little**   **3 = some**   **4 = quite a lot**   **5 = a lot**

b. How do you rate **<u>your</u> academic learning** in today's SGW learning experience?

   Chapter 1 **= none**   **2 = very little**   **3 = some**   **4 = quite a lot**   **5 = a lot**

c. How do you rate your **<u>peers'</u> participation** in today's SGW learning experience (those in your group)?

   1   = none   **2 = very little**   **3 = some**   **4 = quite a lot**   **5 = a lot**   **6 = varied**

                                                                                                                                      (some participated, some did not)

d. How do you rate your **<u>peers'</u> academic learning** in today's SGW learning experience?

   1   = none   **2 = very little**   **3 = some**   **4 = quite a lot**   **5 = a lot**   **6 = varied**

                                                                                                                                      (some learnt, some did not)

e. How do you rate **<u>your</u> enjoyment** of today's SGW learning experience?

   1   = none   **2 = very little**   **3 = some**   **4 = quite a lot**   **5 = a lot**

Small Group Work Activity and Reflection Survey

Small group work (SGW) learning experiences reflection survey

This survey is to provide you, the participant teacher, with an opportunity to reflect on general SGW use and outcomes in your class.

As with the initial survey about perceptions and use of SGW, please know that all responses are confidential and information identifying respondents will not be disclosed under any circumstances, that is, confidentiality is ensured.

I am interested in your personal opinions and experience. Please give your answers sincerely, as only this will guarantee the success of the research. Thank you very much for your help.

Note- for the purposes of this survey, the following definitions apply:

SGW learning experiences are defined as situations when between 2-5 students work collaboratively on a set task for a pre-determined period of time, for example, ranging from 20 mins in-class to half a semester on a group project.

English language learners (ELL) are defined as those who are taken a Language A in addition to, or other than, English.

1. Please write the date, time, unit and class of the SGW learning experience that was the focus of the observation e.g Monday, 15th September, pd 1, Poetry unit, grade 11

2. Please select how the configuration of the SGW members was determined. You may select more than one option if necessary, for example: Teachers' choice, including what role students had in the group AND Mixed ability groupings.

☐ Students' choice, including what role they had in the group

☐ Students' choice, teacher determining which role each member had

☐ Teacher's choice, including what role each member had

☐ Teacher's choice, with students choosing which role they had

☐ Mixed ability groupings (that is, higher proficiency students with lower proficiency students)

☐ Ability groupings (that is, students grouped together according to their relative proficiency)

☐ Other (please feel free to describe alternative configuration in the comment box, below)

Method used for determining SGW configuration

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3. How would you describe the type of SGW configuration of the groups?

☐ Pair work

☐ Three members per group

☐ Four members per group

☐ Five members per group

☐ Varied (between 2-5 members per group)

☐ Other (please feel free to describe in comment box below)

Type of configuration, if not listed above

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4. What is the duration of this SGW learning experience?

☐ A one-off SGW learning experience, completed in one period

☐ A SGW learning experience that will continue into another period

☐ A SGW learning experience that will last a week

☐ A SGW learning experience that will last between one to three weeks

☐ Other (please feel free to describe in the comment box, below)

What is the expected duration of this SGW learning experience?

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5. For the SGW learning experience in question, please could you reflect on the following: any positive outcomes/observations?
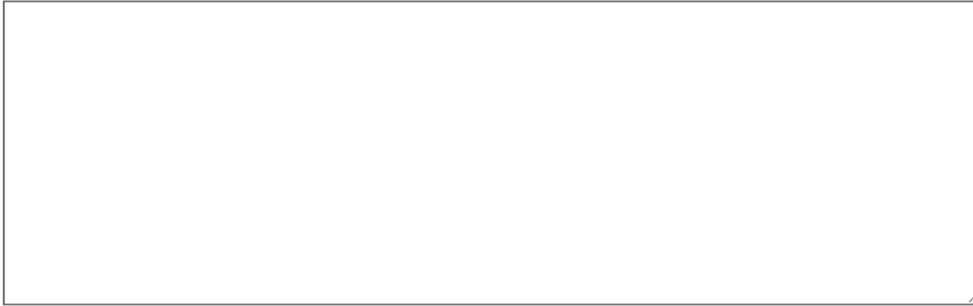
6. For the SGW learning experience in question, please could you reflect on the following: any challenges? i.e anything that made the SGW activity difficult to complete?

7. For the SGW in question, please could you reflect on the following: any obstacles? i.e anything that prevented the SGW activity from happening?

8. For the SGW learning experience in question, please could you reflect on the following: any unexpected outcomes? i.e an outcome that you had not anticipated previously?

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9. Overall, would you say that the SGW learning experience achieved the outcomes you had intended in terms of academic learning? (please feel free to elaborate in the comment box below)

☐ Yes definitely

☐ Yes partially

☐ Not sure

☐ No

Other (please specify)

10. Did any other event/reflection occur as a result of this SGW activity that is not covered above, that you would like to comment on? e.g student responses in subsequent sessions were improved as a result of this SGW

First of all, thank you for agreeing to participate in this phase of the research. Please know that as per the consent form you have signed, you have the right to decline to answer any questions, and you may also request that I turn off the audio-recording device at any time during this interview.

This meeting has three parts:

- Part 1 = A review of your peers' responses to baseline survey on perceptions of SGW, as compared to your own x 7 questions

- Part 2 = A review of the students perceptions about SGW learning experiences x 11 questions

- Part 3= A review of your past and present perceptions about SGW learning experiences x 3 questions

The purpose of this meeting is to probe a little deeper into perceptions and use of SGW, so any additional comments you would like to make after viewing the data (for example agreeing, disagreeing, surprise, neutral) are most welcome. You may also like to comment on your recent personal experience with facilitating SGW learning experiences in your classes.

I will be discussing the 'top three' results for each question, and skimming over the comments questions, to discuss if there are any observable trends.

PART 1

Starting with your peers' responses to the baseline survey (16 responses in total), I will show the data, and please feel free to comment on what you see.

Comments

Q1

Q2

Q3

Q4

Q5

Q6

Q7

PART 2

We will know move onto the students' perceptions (64 in total), I will show the data, and please feel free to comment on what you see.

Q1

Q2

Q3

Q4

Q5

Q6

Q7

Q8

Q9

Q10

Q11

PART 3

Thinking back to the start of this data collection period of SGW learning experiences, would you say your perceptions about the use of SGW teaching learning experiences have **changed** in anyway?

PAST   very favourable (1) _____ ____ ____ ____ unfavourable (6)

NOW   very favourable (1) _____ ____ ____ ____ unfavourable (6)

Could you please give a reason for your response above?

Do you have any final questions or comments about perceptions and use of SGW within an international school environment?

Finally, a very big thank you for all the information you have provided above, it is very much appreciated. It is hoped that the data collected will go some way towards informing future SGW teaching and learning practices here at BIS.

First of all, thank you for agreeing to participate in this phase of the research. Please know that as per the consent form you have signed, you have the right to decline to answer any questions, and you may also request that I turn off the audio-recording device at any time during this interview.

This meeting has two parts:

- Part 1 = A review of your peers' responses to baseline survey on perceptions of SGW, as compared to your own x 10 questions
- Part 2 = A review of your past and present perceptions about SGW learning experiences x 2 questions

Some of the questions will be using a 1-6 scale, or Agree/Disagree, or you can opt for 'not sure', or 'decline', is that okay with you?

PART 1

1. On a scale of 1-6, with 1 being not at all, 2 = occasionally, 3 = sometimes, 4 = usually, 5 = mostly and 6 being you always enjoy, **how do you feel about learning in SGW activities?** Please feel free to explain the reason for your rating and comment on how it compares to the results from your peers.

Response:

Notes:

2. **How I feel about participating in SGW depends on…….?** Please select 1-2 items
Please feel free to explain the reason for your choices and comment on how it compares to the results from your peers.

- the curriculum area
- the task we are required to do during the SGW
- how clear the teacher's instructions are
- how I am feeling
- who is in my group
- how group membership is decided
- how long we have to work on the task

Response:

3. On a scale of 1-6, with 1 being you think SGW is not at all as effective as working on your own and 6 being SGW is far more effective than working on your own, **how do you feel about the effectiveness of your learning in SGW, as compared to working on your own?** Please feel free to explain the reason for your rating and comment on how it compares to the results from your peers.

Response:

Notes:

4. On a scale of 1-6, with 1 being SGW never helps you learn academic language and 6 being SGW always helps you learn academic language, **how do you feel about use of SGW in helping you learn academic language?** Please feel free to explain the reason for your rating and comment on how it compares to the results from your peers.

Response:

Notes:

5. On a scale of 1-6, with 1 being SGW has never helped you with getting a higher grade in summative assessments and 6 being SGW always helps you get higher grades in summative assessments, **how do you feel about the use of SGW for the teaching and learning of summative assessment tasks?** Please feel free to explain the reason for your rating and comment on how it compares to the results from your peers

Response:

Notes:

6. **How do you think members in SGW teams should be decided?** Please feel free to explain the reason for your rating and comment on how it compares to the results from your peers.
    - Teacher decides
    - Students decide
    - Random
    - Unsure
    - Don't mind
    - Other

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7. I am going to read out a list of statements and I would like you to indicate whether you agree with them, or not. In your opinion, **what are the most useful strategies you think teachers could use to make SGW teaching and learning more effective**:

AGREE/DISAGREE/ NOT SURE/DECLINE

- Giving everyone in the small group a specific role
- Letting students choose who they work with and what roles they have
- Letting everyone make their own notes before joining a small group
- Allowing small groups to work in other spaces (e.g outside of the classroom)
- Allowing small groups to speak in their mother tongue
- Supplying each small group with a checklist/written instructions
- Providing each small group with keywords/phrases
- Checking in, to make sure everyone understands the task before beginning the SGW
- Setting time limits
- I don't know what could make SGW more effective
- Other (please specify)

Response:

8. Now think about **what strategies students could use during SGW to make it a more effective learning experience**, for example:

AGREE/DISAGREE/NOT SURE/DECLINE

- Making sure everyone in the small group has a specific role
- Everyone doing an equal share of the work
- Having a leader
- Less social chatter
- Getting words translated for group members if necessary
- Respecting each other's opinion

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- Having a timekeeper

- Being patient with each other

- Helping each other

- I don't know what could make SGW more effective

- Other (please specify in comments box, below)

Response:

9. Any other positives of SGW that have not been covered above that you'd like to discuss?

Response:

10. **Barriers or challenges of SGW that have not been covered above**?

Response:

PART

Thinking back to the start of this data collection period of SGW learning experiences, would you say **your perceptions about the use of SGW teaching learning experiences have changed in anyway?**

PAST   very favourable (1) _____ ____ ____ ____ unfavourable (6)
NOW   very favourable (1) _____ ____ ____ ____ unfavourable (6)

Could you please give a reason for your response above?

Finally, a very big thank you for all the information you have provided above, it is very much appreciated. It is hoped that the data collected will go some way towards informing future SGW teaching and learning practices here at BIS.

To be taken at five-minute intervals during small group work (SGW) activity, commencing with the first minute of the activity.

Focus of SGW:

Group members (no., including how many EAL students):

Start time:

Finish time:

Observations	Tallies	Totals
1. student *asks* the teacher a **referential question** to (i.e question to which he/she does not know the answer)		
2. student <u>answers</u> a **referential question** posed by the teacher (i.e question to which the teacher does not know the answer)		
3. student <u>answers</u> a **display question** posed by the teacher (i.e question to which the teacher expects the students to know the answer)		
4. student *asks* a **referential question** to the SGW participants (i.e question to which he/she does not know the answer)		
5. Student <u>explains</u> a **grammatical point** to the SGW participants		
6. Student <u>explains</u> **meaning of a vocabulary ite**m to the SGW participants		
7. Student <u>explains</u> a **point relating to the content** to the SGW participants (theme/topic) of the lesson)		
8. Student <u>gives</u> **instructions/directions** to the SGW participants		
9. Student <u>answers</u> a **referential question** posed by SGW participant/s (i.e question to which the SGW member/s does not know the answer)		
10. Student <u>engages</u> in **off-task talkin**g with SGW participants		

KEY

* = denotes observation of EAL student behaviour

/ = denotes observation of non-EAL student behavior

(adapted from Nunan's classroom observation sheet, cited in Gass et al., 2007, p. 166)

Name/email	CLASS	ROLL	CONSENT FORMS SIGNED	SURVEY	SGW#1	SGW#2	Comment
'Jill' #4	Maths (gd 11HL)	✔	✔	28/11/14 (only had two additional students fill it in, as rest had already done it – but she had them complete in hardcopy form.	28/11/14 ✔ and reflected on: 28/11/14 (and download ded)	1/12/14 ✔ and reflected on: 1/12/14 (and download ded)	17/9/14 – sent follow up email, reattaching info sheet and consent form, inviting for preliminary meeting, with deadline 26th Sept 30/9/14 – meeting pd 4 TBC – I would go to her at the start of the period. Need to compare her roll with other participants DONE 4/11/14 - sent email asking when survey and SGW x 2 is going to be scheduled 28/11/14 – sent me an email today advising that she was going to be scheduled ahead with SGW#1 today. Also advised: Almost everyone had already done the survey so I just got two more students to fill it in. The two activities are separate. I haven't decided if the next one will be Monday or Tuesday next week, probably Tuesday .
'Louise' #2	Chemistry (gd 11)	✔	✔	21st October pd 5 ✔	21st October? ✔ and reflected on: 22/10/14 (and download ded)	22nd Oct ✔ and reflected on 22/10/14 (did one reflection for both SGW), 28th Nov ✔ and reflected on 28/11/14	17/9/14 – sent follow up email, reattaching info sheet and consent form, inviting for preliminary meeting, with deadline 26th Sept 26/9/14 – Completed preliminary interview. Getting back to me with dates for baseline testing and SGW times. Need to compare her roll with other participants DONE (overlaps with participant #1 and pilot group) 21/10/14 – administering survey, and doing first SGW activity 4/11/14 – sent email asking when second SGW is going to be scheduled 8/11/14 – SGW reflection #1 saved in folder. 28/11/14 – she completed a further SGW (and got students to do exit slip (NB – this participant misunderstood, and issued exit slips at the end of an initial double period of SGW, that was non-consecutive, thinking this was one episode)
'Hans' #5	Physics (gd 12)		✔	17th Nov	13th Nov ✔ and reflected on: 13 th Nov cosmology pd 6	18th Nov ✔ and reflected on: 18th Nov Astronomy Pd 1	17/9/14 – sent follow up email, reattaching info sheet and consent form, inviting for preliminary meeting, with deadline 26th Sept 30/9/14 – meeting pd 4, he's coming here at the end of the period Need to compare his roll with other participants DONE 4/11/14 - sent email asking when survey and SGW x 2 is going to be scheduled 9/11/14 – received reply about scheduling of baseline survey an SGW # 1 10/11/14 – participant #5 sent roll and times for survey and SGW #1 (both together), plus tentative for no. 2 13/11/14 – participant sent email saying: I'll drop the exit slips off in your pigeon hole. 17/11/14 – seems the slips from 13/11/14 got lost/mislaid, so the participant got the students to do them again today, as well as doing the survey (which he forgot about on 13/11/14 23/11/14 – read this participant's reflections, however it wasn't clear what the students actually did during the SGW phases, so will need to clarify what type of tasks they were engaged in.
'Mary' #3	Bio (gd 12)	✔	✔ (but only individual not focus group)	8/10/14 ✔	8/10/14 ✔ and reflected on: 8/10/14 (and download	24/10/14 ✔ and reflected on: 26/10/14 (and download	17/9/14 – sent follow up email, reattaching info sheet and consent form, inviting for preliminary meeting, with deadline 26th Sept 30/9/14 – meeting pd 3, room 262 Need to compare her roll with other participants DONE – no effect as her group went first, and as they were grade 12, they were not in the pilot group. Had to reschedule to 6/10/14 due to participant being put on Cover.

					ded)	ded)	8/11/14 – statistics from 2 x SGW entered into spread sheets AND reflections saved in folder 9/11/14 – sent email with student responses and SGW reflections, requesting a time fo final interview.
'Petra' #1	Bio (gd 11)	✔	✔	23/10/14 pd 5 X rescheduled for 27/10/14 pd 1	29/10/14 ✔ and reflected on: 29/10/14 (and download ded)	31/10/14 ✔ and reflected on: 31/10/14 (and download ded)	19/9/14 – sent follow up email, reattaching info sheet and consent form, inviting for preliminary meeting, with deadline 26th Sept 25/9/14 – Had preliminary interview. Agreed on dates for baseline testing and SGW times at that time <mark>Need to compare her roll with other participants</mark> DONE 8/11/14 – SGW reflections x 2 saved in folder
'Anka' #6	German (gd 12 HL)		✔	17/11/14	17/11/14 exit slips received ✔ and reflected on: 24/11/14 (and download ded)	Unable to fit in another episode	22/10 – need her roll to compare to participant #3 class 4/11/14 - sent email asking when survey and SGW x 2 is going to be scheduled 17/11/14 – seems there was a misunderstanding about exit slips and this participant only got the students who hadn't previously done the baseline survey to do them, instead of the whole group. One student from this class volunteered to participate in follow up. 23/11/14 – sent email asking about reflection for SGW #1, as couldn't find one in Surveymonkey. 25/11/14 – found reflection , it was entitled Unit Option: Technology and Science, grade 2), hence the confusion. Sent this and exit slip graph of results via email

Dear Class

I have volunteered to participate in Ms Cameron's research into small group work learning experiences within an international school environment. She is doing this research to achieve a Masters in Second Language Teaching.

The first phase of her research involves gathering baseline data, so she has created a survey to gather information about your use and perceptions of small group work. This is the link:

https://www.surveymonkey.com/s/KH5NXMQ

There are 12 questions in total, and it is estimated that you should take no more than between 10-15 minutes to complete it.

All your responses are anonymous, except for the last question, where you are given the option of participating in a follow-up interview (could be individual, or with a group). If you are interested, please could you enter your email address in the last box, so Ms Cameron can contact you personally.

Two points about the survey:

- You will notice that 'SGW' is used throughout. This is an acronym for *small group work*.
- A number of the questions may feel like they are asking for similar information, however this is deliberate. The purpose is to double check perceptions from slightly different angles.