School Based Research Project Final Report

Building professional capital through the implementation of assessment *for* learning practices

All Saints Grammar







School-Based Research Project

Full Project Title:

Building Professional Capital Through the Implementation of Assessment For Learning Practices

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Executive Summary

This paper is a descriptive report of the School-Based research project conducted at All Saints Grammar over the period of 2016 and 2017. It outlines the processes followed at the school to establish a culture of professional learning through a focused implementation of Assessment For Learning principles and practices as the school's pedagogical framework.

All Saints Grammar aims to provide excellent teaching and learning for every student in every classroom. The school aims to deliver equity and quality in education to improve student outcomes. At the heart of achieving this aim is the building of professional capital for all teachers.

Assessment For Learning, as a pedagogical framework, is considered the most effective approach to improve student learning. For this reason All Saints Grammar has adopted the work of Paul Black and Dylan Wiliams, and in particular Wiliams' five strategies of formative instruction. As such, the school undertook a concerted program of professional development intervention. This professional learning program focused on developing teacher expertise on,

- Understanding, Developing and Sharing Learning Intentions and Success Criteria
- Engineering effective discussions, tasks, and activities that elicit evidence of Learning
- Providing feedback that moves learners forward
- Activating students and resources for one another
- Activating students as owners of their own learning

Essential questions underlying the focus of the collaborative process were,

- Where is the learner going
- Where is the learner now
- How to get the learner there

The project explored the following research questions:

• What is the teachers' perception about the impact of implementing Assessment For Learning principles and strategies on their teaching practice?



- What is the teachers' perception about the impact of implementing Assessment For Learning principles and strategies on the professional learning culture of the PK-12 school?
- What is the teachers' perception of the impact of implementing Assessment For Learning principles and strategies on student learning?

The process of data collection involved adapting existing instrument, such as Alonzo & Davison (2013) Assessment For Learning Teacher Competence Framework. The research team developed student feedback surveys to ascertain students' perceptions of the implementation of Assessment For Learning practices. The Irving Student Evaluation of Accomplished Teaching Scale (Appendix F, Hattie, 2012) was also adapted to gather data on students' evaluation of teacher classroom practice. An evaluation questionnaire was designed to collect data on teachers' perceptions about their engagement in the professional learning program and its impact on their teaching practice and students' learning.

This report presents a literature review on Assessment and the evolution of Assessment For Learning to situate the research project at All Saints Grammar in the context of that evolution. The descriptive methodology and the instruments used throughout the project are explained and discussed.

While it may be difficult to argue for a definite model to achieve school improvement that focuses on enhancing learning opportunities for students, this project has shown that a coherent leadership approach that focuses its direction on developing collaborative cultures to deepen learning is definitely a sound approach to secure professional accountability from all stakeholders.



Research Project Background

Most educational systems around the world are trying to identify and describe the teaching competencies that ensure high quality learning and teaching. As a result most jurisdictions have attempted to put in place teacher professional standards to guide the process of accrediting and assessing teacher competence. In the context of establishing clear roles and responsibilities for teachers, these Professional Standards are believed to enhance teaching performance by providing greater support.

The competence of the teacher is closely associated with student improvement and student achievement (Ferguson & Brown, 2000; Sanders & Rivers, 1996). The evidence from the research shows that effective teachers are able to create a productive learning environment for their students. The contribution of teachers to student learning explains 30% of the variance observed in student performance (Hattie, 2003). This means that teacher competence is the next most important determinant of student achievement after the students themselves. However, as Hattie (2008) puts it, not all teachers have a positive impact on student achievement. Rather, it is some teachers, implementing some well thought-out practices, who can make a difference to student performance. Hattie (2008) emphasises that about 95% of what teachers do in the classroom influences student achievement, but not all of these teacher activities positively impact student learning.

In order to optimise student learning and achievement, it is vital to focus efforts on improving teacher competence to positively impact student learning. One of the key effective teacher competency identified in the research, is teachers' ability to use assessment and student assessment information to improve student learning (e.g., Black & Wiliam, 1999; Hattie, 2008; Popham, 2009; Stiggins, 2005). These educational researchers put forward Assessment For Learning as the most effective educational and philosophical paradigm for teachers to develop this important skill in their practice.

This study will focus on the implementation of a teaching and learning framework based on Assessment For Learning principles and practices at an Independent school in South West Sydney, All Saints Grammar (ASG).

The project's focus needs to be understood in the context of the school's overall efforts to build a culture of continuous school improvement that ultimately improves students' academic and social outcomes. The work ASG embarked on as a result of this goal included a well-integrated



leadership framework that would offer coherent leadership direction to the school operation. ASG has adopted a leadership approach informed by Fullan's 'Coherence' framework (Fullan & Quinn, 2016). The key domains of this leadership framework are, Focussing Direction, Cultivating Collaborative Cultures, Deepening Learning, and Securing Accountability.



⁽Fullan & Quinn, 2016)

While the ultimate goal of the school's operation is to improve students' learning outcomes, ASG embraces the importance of the most significant in-school factor affecting student achievement, namely, the teacher (Wright, Horn, & Sanders, 1997). For this reason, a core purpose of this project has been to build the professional capacity of teachers. Consequently, teachers have engaged in a journey of professional learning aimed at developing teacher expertise on the implementation of Assessment For Learning practices.

The various interrelated layers of the project are best captured in the image below.



A Whole School Approach to School Improvement Focused on Improving Student Academic and Social Outcomes (ASG – 2016)



All Saints Grammar is a comprehensive PK-12 school in Belmore Sydney. The school's main focus is to cater for the educational needs of students of families with Greek Orthodox background. More and more, however, the school is broadening its demographics to the wider populations, with students of Serbian, Chinese, Sri Lankan, and other backgrounds attending the school at present. During its twenty-seven years of existence the School has built reputation for setting itself ambitious goals and expectations to achieve excellence while facing the well-known difficulties of a small Independent school.

The student population, in its great majority, comes from families with background other than English as a first language. Some of the families are recent arrivals to Australia. While this adds to the richness of the school it also presents significant academic and cultural challenges. The comprehensive nature of the student population brings with it a scope of diverse needs. The school



makes every effort to cater for the academic, social and cultural, emotional and spiritual needs of all the children under its care.

The school's teaching staff consists of a committed group of professionals, some who have served the school for the majority of their teaching career, while others are just beginning their service at the school. While the school did not have an explicitly stipulated approach to instruction, its students rely heavily on the explicit teaching and guidance from their teachers.

The current educational climate, with various changes to syllabuses, the introduction of National Standards, and the continuous community expectation for high levels of performance, more than ever demands a clear educational vision for schools. At the core of the vision for this school is the development of comprehensive frameworks for teaching and learning to guide the strategic direction of the school into the future.

Scope of the Project

The scope of this project expands well beyond the focus of this report. Nevertheless, this paper will attempt to contextualise and integrate the most important aspects involved in the implementation of the project. This approach will provide a better opportunity to capture a more accurate understanding of the impact the project has had on All Saints Grammar's culture of continuous school improvement through professional learning.

Firstly, given its focus on the quality of teaching and learning at ASG, a key the project involved the development and implementation of professional learning modules which would be to engage teachers in an exploration of the key principles and strategies of Assessment For Learning. Teachers worked together collaboratively in PK-12 Professional Learning Sessions.

Secondly, the project involved the introduction of Alonzo and Davison (2013) Teacher Assessment For Learning Competence Framework. This tool has been used to provide teachers with an opportunity to self evaluate their practice, and it provided our school a measure of progress on key



aspects of Assessment For Learning competence as measured by the instrument. The nature of the tool and the domains it covers will be discussed as part of the literature review and the methodology sections of this report.

Thirdly, the process of Open to Learning Conversations (OtLCs) will be discussed as part of the qualitative data collected to gain an impression of the practical classroom implementation of the Assessment For Learning principles and strategies, as discussed in Professional Learning sessions. This Open to Learning Conversations were utilised to offer teachers and opportunity to receive feedback from colleagues about their classroom implementation of the AfL framework. The OtLCs provided qualitative data on the impact of teacher's AfL competence and practice on students' engagement in learning opportunities.

Fourthly, a final evaluation questionnaire was developed and piloted to measure the extent to which teacher engagement in the ongoing professional learning impacted their teaching practice and student engagement.

Aims and Research Questions

The Research Questions:

- What is the teachers' perception about the impact of implementing Assessment For Learning principles and strategies on their teaching practice?
- What is the teachers' perception about the impact of implementing Assessment For Learning principles and strategies on the professional learning culture of the PK-12 school?
- What is the teachers' perception of the impact of implementing Assessment For Learning principles and strategies on student learning?



Rationale, Justification and Aims

This project is the school's response to the NESA Syllabuses for the Australian Curriculum's directive to make Assessment For Learning (Assessment For Learning) an essential part of quality teaching and learning. In addition, the comprehensive nature of the student population, the school sees it as important to prioritise, promote and implement a clear and shared view on pedagogical practices across its PK-12 context aimed at enhancing teacher capacity and student learning.

It is expected that the project to implement an Assessment For Learning framework at the School will impact significant aspects of the school culture, including:

- Developing an atmosphere in which teachers can engage in Open to Learning Conversations, that is, to actively support peer observation
- Recognising and valuing current skills and help teachers to identify and improve their current formative practice
- Engaging in continuous professional learning discussions around the framework and thus promoting a culture of professional collaboration
- Promoting a culture of positive relationships between teachers and their students based on feedback for learning and the improvement of student outcomes
- Engaging in the analysis of information and data to inform the development, modification, and differentiation of programs of study to cater for the needs of students
- Facilitate teacher preparation time to plan strategically and effectively.

In order to achieve these goals, the research project will aim to:

- Develop a whole-school commitment to the Assessment For Learning approach including involvement and leadership of senior staff to embed Assessment For Learning
- Develop clarity of messages at the school level the development of an Assessment For Learning framework needs to be informed and explained to all stakeholders, including students and parents



- Develop a culture of Professional Learning. Teachers will take part in well-developed and recognised professional development sessions that help them develop a flexible and deep understanding of this approach, and not just to accumulate a set of techniques they might apply without the required level of reflection
- Influence teacher classroom practice in a deliberate and concerted manner implementing Assessment For Learning strategies to ensure quality teaching and student engagement
- Improve student engagement with and achievement of outcomes in line with the school vision
- Collect qualitative and quantitative data to ascertain the impact of the framework on student engagement and achievement of outcomes, and the quality of teacher classroom practice.

Structure of the Report

In this section of the report, the background, rationale and context of the study have been provided. The reasons and aims of the project have been outlined and the key questions for investigations have been presented. The focus and scope of the project covered in this report have been addressed.

The next section of the report is dedicated to a discussion of the literature review on the key focus of this project, the research and implementation of Assessment For Learning principles and practices. The core argument of this literature review is the proposition that in while Assessment For Learning is not necessarily a new construct, there has been a variety of approaches or phases of development and implementation for the better part of the last forty years across various jurisdictions around the world, including Australia.

The following chapter discusses the methodology for the study is presented including the research design and the analyses of the data. The findings of the study are discussed in the section following the methodology chapter, with an emphasis on the contributions of the study to the literature. The concluding section summarises the major findings of the study and its conclusions, and presents the implications for research, policy and practice.



Literature Review

This chapter presents a review of the literature on assessment in order to explore the various stages of evolution in the thinking about evaluation of learning. In this way, this review will situate this study in the continuum of changing understanding about Assessment For Learning and its implementation in the PK-12 context of All Saints Grammar.

The important role that assessment has in the teaching and learning process is indisputable. The form assessment takes, and the purpose for which it is used, however, have been the subject of many academic discussions and research studies. Teachers are called upon to make judgments on the level of learning achieved by their students and are expected to have the expertise to design and use tools to measure, diagnose and evaluate growth in learning. In the context of the Australian Institute for Teaching and School Leadership, AITSL, the institute and its Standards for teachers, places the improvement of classroom practice as a critical aspect of the Australian Teacher Performance and Development Framework. AITSL argues that

"every day in classrooms across Australia teachers are assessing what their students know and what they still need to know, based on their expert content knowledge and understanding of their students and how they learn. This knowledge base enables them to understand where their students are currently situated on a particular learning pathway and to know what to do to move the learning forward." (<u>http://www.aitsl.edu.au/classroom-</u> <u>practice</u>)

Such is the importance placed on this teacher skill that the Australian Professional Standards for Teachers established to guide and monitor teacher professional practice includes a specific reference to teachers being able to "Assess, provide feedback, and report on student learning" (NESA 2017). In the first three years of their teaching practice, teachers in the Australian context are expected to be proficient at developing, selecting an using an array of assessment tools to fulfill various purposes in the process of evaluating students' progress towards achieving set learning goals. In addition, at the Proficient level, teachers are expected to be able to provide students with



effective feedback about their progress in learning, and teachers are expected to use the data collected from assessment to modify their teaching practice (NESA 2017, pp.16-17). This emphasis on teacher expertise in assessment reaffirms its pivotal place in the learning process. Janet Looney (2009) makes the case for the importance of assessment in her report for the OECD when she states that "getting assessment right will be one of the most important priorities for education systems", arguing that, "those systems that best support diversity and complexity, and that have effective ways to evaluate learning will have the richest opportunities to deepen knowledge" (p.7).

Understandings about assessment, the purpose of its use, and the form it should take have been a matter of social and academic discussion for some time. One of the earliest forms of assessment use appears in early China where official government positions were filled through a rigorous system of examinations on Confucian philosophy and poetry in which applicants had to take part (Fletcher, 2009). This use of assessment highlights the significant social impact that assessment can have and, therefore its crucial place in the education process. As Fletcher asserts, the period of the Industrial Revolution in the 1800s saw the emergence of assessment, of the standarised kind, emerge "as an easy way to test large numbers of students quickly" (Fletcher, 2009). The use of standarised testing continues to be prominent in our current education systems and they provide useful information about students' progress in learning, which can be used for a variety of purposes. In any case, its value and impact on student learning is a matter of academic debate (Harlen et al., 2002).

The understanding, form and use of assessments in education has changed or expanded since these early experiences of student evaluation. Nevertheless, what constitutes effective assessment continues to be a matter of academic discussion. Such is the concern about assessment that Masters (2013) goes to the seemingly extreme assertion that "the field of educational assessment is currently divided and in disarray" (p.1), and that "the field remains fractured, divided into camps, and limited in its ability to respond to the opportunities and challenges it now faces" (p.2). Masters argues that there is a need to develop a unified theory of assessment that can "provide the most practicable, valid and reliable information about where learners are in their learning" (p.6) which he considers to be the purpose of all forms of assessment, be it summative, formative, quantitative



or qualitative, or others. Moreover, the OECD 2015 report states that "evaluation and assessment policies can pose two key challenges: balancing accountability and improvement and ensuring the capacity of education stakeholders to develop and use evaluation" (p.95), cautioning that "a lack of balance between accountability and improvement can distort the goal of enhancing student outcomes (OECD, 2013a)" (p.95). These arguments draw attention to the significant continuous academic debate about assessment in education. This debate is important as it affects classroom practice, directly impacting students' learning. The debate also highlights the role that teachers play in the process of assessing student learning and the way in which teachers use the information they gather from assessments, or fail to use it, as part of their practice.

Early mention of the various uses of evaluation appears in the work of Michael Scriven (1966) and Bloom (1969). While these authors are exploring the use of evaluation beyond the scope of just teaching and learning, both authors point to the use of evaluation data for various purposes, identifying formative evaluation as the kind of assessment where the data is used for the purpose of making modification to existing programs or practices. Scriven (1966) states that, "[evaluation]... may have a role in the improvement of the curriculum..." (p.4) and Bloom (1969) argues that, "the use of "formative evaluation" *[is]* to provide feedback and correctives at each stage in the teaching-learning process" (p.48). The distinction is made from summative evaluations where the purpose of the information gathered is more about judging the value of a program or whether learning had occurred by the end of a period of instruction. The focus of this review will be on formative assessment and its purpose and function as an integral part in, rather than separate from, the process of teaching and learning.

Over the last 30 years of educational research various reviews have been conducted where the impact of classroom practice on student achievement has been specifically investigated. Some of these reviews include, Fuchs & Fuchs 1986; Natriello, 1987; Dempster, 1991, 1992; Kluger & DeNisi, 1996; Black & Wiliam, 1998; Nyquist, 2003; Wiliam, 2007; Hattie & Timperley, 2007; Shute, 2008. Of seminal significance and influence has been the work of Paul Black and Dylan Wiliam (1998). Their work reviewed the research on formative assessment drawing on 250 international sources, focussing on classroom-based approaches and techniques and their impact on student learning. Black and Wiliam (1998) confirmed the conclusions reached by earlier reviews



conducted by Natriello (1987) and Crooks (1988). These researchers concluded that formative assessment as educational intervention produces the largest achievement gains ever reported, and because of its effectiveness, in particular for lower achieving learners, formative assessment can reduce inequity and raise overall achievement (Looney, 2009). For these reasons, formative assessment is being strongly promulgated by a large number of education systems internationally (Learning and Teaching Scotland, (2006); Department of Education and the Arts, (2005); Hong Kong Curriculum Development Council, (2001); Singapore Ministry of Education, (2008); as well as locally in Australia (DET, (2008), <u>http://arc.boardofstudies.nsw.edu.au/go/sc/afl/</u>) and Curriculum Corporation, (2009), <u>http://www.assessmentforlearning.edu.au/assessment_tasks/</u>.

More recently in the NESA Syllabuses for the Australian Curriculum, all new syllabuses state, "the Board of Studies Years K-10 syllabuses particularly promote *Assessment For Learning* as an essential component of good teaching." (<u>https://syllabus.nesa.nsw.edu.au/english/english-k10/syllabus-assessment/</u>). (It is worth noting the use of Assessment For Learning to refer to formative assessment; a distinction to be discussed later in this review).

The NESA provides a model for the process of understanding and developing assessments that includes key features of a formative approach (see figure below). The model proposes that an effective assessment process emphasises,

"outcomes are central to the decisions teachers make about teaching, learning and assessment; the importance of gathering evidence about student learning in relation to the outcomes; how teachers use evidence to determine how well students are achieving in relation to the outcomes; the importance of teacher feedback and student reflection; how evidence of student achievement informs future teaching and learning.



(https://syllabus.nesa.nsw.edu.au/assets/global/files/advice_on_assessment_guide_web.pdf)

Looney (2009), moreover, states, "several OECD countries now promote formative assessment as a key strategy for meeting goals for quality and equity" (p.8). The pivotal place of formative assessment in the educational scene seems indisputable nowadays. Its development as a concept over the last four decades however, has not been without varying understandings of its meaning and various approaches to effective implementation.

Since Scriven's (1967) use of the term formative assessment the concept has evolved to be referred to, at times interchangeably, as Assessment For Learning. Furthermore, other researchers have refer to the practice as "assessment that supports learning" (Gibbs and Simpson, 2004), or 'learning-oriented assessment' (Carless, Joughin and Mok, 2006). Although some differences do exist in the use of these terms, they all claim to focus their purpose on the improvement of student



learning. Paul Black, one of the most prominent proponents of the concept, has referred to the variety of terms that claim to be formative assessment as 'a free brand name to attach to any practice' (2006, p11). Such variety in the way in which formative assessment is referred to may be explained by its various manifestations around the world. For this reason, examining the way in which the concept has been defined may help us reach a clearer understanding of its features and the reasons for the effectiveness of its impact. As suggested by the work in assessment reform conducted by Davison (2013) in Hong Kong, Brunei, and Singapore, the extent to which assessment reforms succeed or fail can depend on the extent to which all stakeholders share understandings of Assessment For Learning.

Sadler (1989), provided a widely accepted conception of formative assessment proposing that in this approach students know the standard they are expected to achieve, know where they are at, and are aided in putting in place the steps to close the gap in their learning. He states, "formative assessment is concerned with how judgments about the quality of student responses (performances, pieces, or works) can be used to shape and improve the student's competence by short-circuiting the randomness and inefficiency of trial-and-error learning" (p.120). Sadler highlights the importance of feedback in the process of closing the gap, as well as the need for the student to learn to self-evaluate so that they can develop expertise in the process of learning. He says, "teachers use feedback to make programmatic decisions with respect to readiness, diagnosis and remediation. Students use it to monitor the strengths and weaknesses of their performances, so that aspects associated with success or high quality can be recognized and reinforced, and unsatisfactory aspects modified or improved" (pp.120-121).

Various authors are attributed with the first use of the term Assessment For Learning to refer to formative assessment, including Sutton (1995) in the form of the title of her book, or to James (1992) in a paper delivered at the Association for Supervision and Curriculum Development, or to Gipps and Stobart (1997) who wrote chapters in their book titled Assessment For Learning to differentiate it from Assessment Of Learning. They have in common, however, the attempt to define the characteristics of an assessment whose purpose is to improve student learning. In 2002 the Assessment Reform Group provided a definition which is now widely accepted, asserting that "Assessment For Learning is the process of seeking and interpreting evidence for use by learners



and their teachers to decide where the learners are in their learning, where they need to go, and how best to get there" (p.1). Many researchers have put forward definitions that explain what Assessment For Learning is, including Black et al. (2004) Broadfoot et al. (2002), Cowie & Bell (1999), Looney (2005), Kahl (2005) Shepard et al. (2005). More recently, researchers have refined our understanding of Assessment For Learning, including Davison (2007) who modifies Black, Harrison, Lee, Marshall & Wiliam, 2003, p. 2-3) by commenting that it needs to include summative assessment:

"Assessment For Learning (AfL) is any assessment *(including summative assessment)* for which the first priority in its design and practice is to serve the purpose of promoting pupils' learning. ... An assessment activity can help learning if it provides information to be used as feedback, by teachers, and by their pupils in assessing themselves and each other, to modify the teaching and learning activities in which they are engaged."

Furthermore, Black and Wiliam (2009) suggest what is considered a significantly comprehensive definition of the concept, (Wiliam, 2009). Black and Wiliam (2009) explain the concept as follows:

Practice in a classroom is formative to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about the next steps in instruction that are likely to be better, or better founded, than the decisions they would have taken in the absence of the evidence that was elicited. (p. 9)

Alonzo (2013) proposes that the development of understandings about Assessment For Learning can be divided into three waves, encompassing three overlapping periods where "each successive period attempted to account for the weaknesses of its predecessor" (p.53). In his review of the literature, Alonzo (2103) labels these periods as Wave 1: 'Adoption, Dichotomisation and Formalisation'; Wave 2: 'Complexification and Exploration'; and Wave 3: 'Period of Realisation and Reconciliation' (pp. 53-64). He explains that Wave 1 is characterized by the clear distinctions made between summative assessment and formative assessment. During this wave, these two types of assessment were seen as mutually exclusive with a clear privileged position given to



summative assessment in the education scene. This is particularly the case in countries such as the United States of America and other non-English Speaking countries where examinations are used for the purpose of accountability. Concerns about assessment for accountability purposes were raised by many academics. Bob Stakes (1999), for example, highlighted the problem when he argued that "assessing education well may depend on assessing it less". Pellegrino (1999), moreover, argues that assessments for accountability

"are primarily assessments of achievement intended to determine how well students and educational systems are doing. Generally, all of the assessments ... serve the needs of audiences other than the examinee. In fact, they provide minimal direct and immediate feedback to the examinee. The information de-rived from such instruments is typically used by others who are relatively distal to the process of teaching and learning and who have purposes other than enhancement of the educational outcomes of individual examinees" (p.7)

Pellegrino proposes that assessment that is going to improve teaching and learning needs to "become an essential part of the design and enactment of contemporary learning environments" (p.5). In other words, assessment needs to fulfill a formative purpose. Rick Stiggins (2005) argues that formative assessment is emerging as a tool for school improvement as it provides teachers with evidence of students' progress and as a result teachers are better able to make 'useful instructional decisions' (p.325). This progression towards the adoption of formative assessment is attributed to the emphasis researchers such as Crooks (1988) and Sadler (1989) placed on the value of feedback. Sadler (1989), following Ramaprasad, (1983) definition, argued that "teachers use feedback to make programmatic decisions with respect to readiness, diagnosis and remediation. Students use it to monitor the strengths and weaknesses of their performance, so that aspects associated with success or high quality can be recognized and reinforced, and unsatisfactory aspects modified or improved" (p.121). In this sense, the proposition that feedback can also become part of the process of summative assessment by making use of the information gathered in ways that can benefit the learning process is a sound idea, entertained by researchers such as Davison (2007). As such the developing relationship between summative assessment and formative assessment spread beyond the USA to other countries including Australia.



The second wave of the Assessment For Learning journey, 'Complexification and Exploration', centers on the work by Paul Black and Dylan Wiliam. Their 1998 report has had significant impact on educational policy in the United Kingdom, Scotland and other Western European countries. As noted earlier, Black and Wiliam (1998) reviewed hundreds of research articles from various countries. Their findings, publicized in a 20-page booklet titled 'Inside the Black Box: Raising Standards through classroom assessment' has been widely quoted in the educational literature since then. Black and Wiliam's report provided a strong support for the use of formative assessment as a tool to improve student learning. This same review, however, identified various issues with the way formative assessment was being used in most classrooms. Black (2004) explains that three main problems were evident. "The first was that the assessment methods that teachers use are not effective in promoting good learning. The second was that marking and grading practices tend to emphasise competition rather than personal improvement. The third problem was that assessment feedback often has a negative impact, particularly on pupils with low attainments who are led to believe that they lack 'ability' and are not able to learn." (p.1) In response to these problems there was an impetus to clarify the concept and expand on what constitutes formative assessment. The term 'formative' seems to have created some confusion amongst teachers. In 2002 (Black et al. 2002) the researchers published an extended definition providing more detail and precision about what Assessment For Learning is and what it involves.

Assessment For Learning is any assessment for which the first priority in its design and practice is to serve the purpose of promoting pupils' learning. It thus differs from assessment designed primarily to serve the purposes of accountability, or of ranking, or of certifying competence.

An assessment activity can help learning if it provides information to be used as feedback, by teachers, and by their pupils in assessing themselves and each other, to modify the teaching and learning activities in which they are engaged. Such assessment becomes 'formative assessment' when the evidence is actually used to adapt the teaching work to meet learning needs. (pp. 2-3)

This second wave, moreover, is characterised by an attempt to explore Assessment For Learning in an effective manner so that it can elicit the learning gains of which it is capable. In the researchers'



mind there was a need to ensure that teachers would implement classroom practices that were not merely 'frequent summative assessment' but rather that some learning action would follow from teachers testing students' progress in learning. (Black et. al. 2002, p.3). The extended and detailed definition of the concept highlighted the importance of feedback in the formative process, as well as the participation of students in the taking action to close the gap in their learning. The Assessment Reform Group, (2002), moreover, defined Assessment For Learning as "the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there" (p.2), highlighting the active participation of students in the assessment and learning process so that they can achieve the intended learning goals. Stiggings (2002), furthermore, argues that it is the participation of students in the learning process what turns formative assessment into Assessment For Learning. He says, "the effect of Assessment For Learning, as it plays out in the classroom, is that students keep learning and remain confident that they can continue to learn at productive levels if they keep trying to learn" (p.5). Self-regulation becomes an important element of Assessment For Learning.

This extended definition continues to make the clear distinction between assessment for accountability, summative assessment, and Assessment For Learning, formative assessment. The impact of summative assessment was investigated during this period of time with findings pointing out the negative effects that it has on learning (Harlen & Deakin, 2003). Given that standarised high-stakes test continue to be a part of educational policy in many countries, the call to find ways of satisfying social expectations of assessment and the impact assessment can have on learning has been made by various academics. The example of Queensland has been brought up as a case in point (Black, et. al 2002) where since 1982 teacher assessment is the preferred method to evaluate student learning for graduation and university entry purposes.

Stiggins (2002) argues that there is a need for a balancing of the use of assessment of learning with Assessment For Learning. Summative assessments, he argues, "cannot inform the moment to-moment, day-to-day, and week-to-week instructional decisions faced by students and teachers seeking to manage the learning process as it unfolds. They cannot diagnose student needs during learning, tell students what study tactics are or are not working, or keep parents informed about



how to support the work of their children. These kinds of uses require assessments for learning" (p.7). Black, et. al. 2002, moreover, summative assessments should be a positive part of the learning process by having students being actively involved in the test process. The academic debate during Wave 2 focuses on ways to clarify what Assessment For Learning involves and its relationship to summative assessment while attempting engage with the formative potential of assessment of learning practices.

According to Alonzo (2103) the third wave in the development of Assessment For Learning is the phase where formative assessment and summative are seen as part of a continuum rather that dichotomous (pp.70-71). In this wave of Assessment For Learning development students' selfassessment skills are seen as a crucial component of the learning process, and teachers' role as activators of learning is identified as a significant in-school factor, influencing student learning (Hattie, 2008). Wave 3 sees the up taking of Assessment For Learning understanding offered by the Assessment Reform Group (2002) in countries such as Hong Kong, Singapore, New Zealand, and Australia, where Assessment For Learning is adopted as government policy for implementation in their school systems. In Asian countries such Hong Kong, all assessments are understood as part of the process enhancing student learning. Kennedy, Sang, Wai-ming, & Fok, (2006) argue that "Examinations are potentially a great tool and can help student learning, so long as they are well-designed and used appropriately (Ho, 2005, p.16). They can provide a scale of achievement for students (assessment of learning) and be a reflective tool for teachers teaching and learners learning (Assessment For Learning)." (p.10). Masters (2013) reviewing conceptions of assessment from the Australian context, moreover, calls for a reconceptualization of our understanding of assessment. He proposes that "assessments should be seen as having a single general purpose: to establish where learners are in their long-term progress within a domain of learning at the time of assessment. The purpose is not so much to judge as to understand." (p.58). Masters concedes that such a reform in understandings assessment requires a rethinking of whole educational systems. Such reforms may be difficult without the necessary change in cultural and social expectations of education (pp. 58-59).

This 3rd wave of development on assessment highlights the changing role of teachers who are required to be activators of learning rather than just facilitators of it; students' role in the process of



assessment and learning is also different as they are empowered to self-assess and act upon feedback in order to achieve set learning goals; other stakeholders such as policy makers also are becoming enablers of a reform process where all forms of assessment have the ultimate formative purpose of enhancing student learning.

The journey of evaluation in education has seen a significant shift in understandings about assessment. From a period of prominence given to summative assessment to a period where summative and formative assessment have become part of a process with a common purpose, namely, informing instruction that moves learners forward. Assessment has shifted from assessing to find out what students do not know to assessing to learn what students understand; from using results to calculate grades to using instructions to inform instruction; from end-of-term assessment by teachers to students engaged in ongoing assessment of their work and others'; from judgemental feedback that may harm motivation to descriptive feedback that empowers and motivates students.

For the purpose of this study, it is proposed that Wiliam's (2011) idea that "any assessment [including summative assessment] can be formative and that assessment functions formatively when it improves the instructional decisions that are made by teachers, learners, or their peers" (p.45) be used as an overarching understanding of the purpose of assessment in the learning process. And that this overarching understanding be used to inform the process of evaluating the implementation of formative strategies that will reflect the instructional decisions made with the intention of enhancing student learning. This process is what this study will call the implementation of Assessment For Learning practices.

The implementation of Assessment For Learning practices will be informed by the processes of "finding out where students are in their learning" – which Masters (2013) calls 'the fundamental purpose of assessment' (pp.5-6), "finding out where they are going, and finding out how to get there" (Wiliam, 2011, p.45). These processes will consider the role of, the teacher, the learner, and the peers, involved in deliberate strategies aimed at using evidence gathered about student learning to adapt instruction. Wiliam's three by three grid of nine cells adapted from Leahy, Lyon, Thompson, & Wiliam 2005 seen below represents this framework well.



| | Where the learner is going | Where the learner is now | How to get the learner there |
|---------|---|--|--|
| Teacher | Clarifying, | Engineering effective discussions, tasks, and activities that elicit evidence of learning | Providing feedback that moves learners forward |
| Peer | sharing, and understanding learning intentions | Activating students as resources for one another | |
| Student | | Activating students as owners of their own learning | |

⁽Wiliam, 2011, p.46)

Fundamentally then, Assessment For Learning emphasises the interactions between learning and manageable assessment strategies that promote learning. It clearly expresses for the student and teacher the goals of the teaching and learning. It reflects a view of learning in which assessment helps students learn better. Assessment For Learning provides ways for students to use feedback from assessment. It helps students take responsibility for their own learning; and it is inclusive of all learners. (*Curriculum planning and programming, assessing and reporting to parents K-12* released in December 2008).

In addition to good pedagogical approaches, the impact of effective teaching has been highlighted as the most significant in-school factor influencing student achievement. As expressed by Wright, Horn, & Sanders, (1997),

"... the most important factor affecting student learning is the teacher. ... The immediate and clear implication of this finding is that seemingly more can be done to improve education by improving the effectiveness of teachers than by any other single factor."



Hattie (2009) moreover, states that it is teachers seeing learning through the eyes of students and students seeing teaching as the key to their ongoing learning that brings about significant improvement in learning. Hattie asserts,

"the current mantra is that *teachers make the difference*. This is not quite right - it is some teachers undertaking certain teaching acts with appropriately challenging curricula and showing students how to *think* or *strategize* about curricula. Not all teachers are effective, not all teachers are experts, and not all teachers have powerful effects on students. The important consideration is the extent to which they do have an influence on student achievements, and what it is that makes the most difference" (Hattie, 2009, p.34).

It would follow then that, and as argued by Heritage (2007) and Heritage et al. (2009), there is an obvious need for teachers to acquire the expertise required to be able to assess students' prior knowledge, and the skills to effectively plan for the next stage of instruction. Saddler (1989) found that teachers without the adequate level of competence in implementing Assessment For Learning practices effectively could affect students learning negatively.

This study will investigate the impact of the implementation of Assessment For Learning practices as a whole school approach on the school's teaching and learning culture and the school's culture of professional learning. In addition, the research will evaluate the impact these practices on the effectiveness of teachers' classroom practice. This study will investigate the impact of the implementation of agreed Assessment For Learning practices adopted by teachers on student engagement and learning. These agreed practices will be based on Wiliam's (2011) schema discussed above.

In the process of evaluating implementation of Assessment For Learning practices the study will use the domains of the teachers' Assessment For Learning Competency Tool (Alonzo and Davison, 2013). The toolw as organised using the six dom ains of teacher A fL literacy with the indicators of teacher AfL practices presented as criteria with their respective five levels of standards. The criteria comprising each factor were further clustered based on thematic analysis to reveal the job



roles of the teachers, in this way making it easier to describe and understand teacher AfL practices.

The following domains of Alonzo's instrument were modified for the purpose of this research project at ASG:

- DOMAIN 1: Teacher as an ASSESSOR this domain covers the skills of a teacher to develop a wide range of assessment tasks and to use a comprehensive system of assessing student learning. Teacher needs to evaluate the appropriateness, usefulness, adequacy, trustworthiness and fairness of his/her assessment practices.
- DOMAIN 2. Teacher as a PEDAGOGY EXPERT- this domain covers the teacher's role of reflecting on assessment information to inform one's teaching approach. The teacher determines students' prior knowledge, interests and levels of ability and uses these in planning the lesson and in implementing the curriculum.
- DOMAIN 3. Teacher as a STUDENT PARTNER this domain requires the teacher to use assessment tasks to actively engage students in teaching and learning activities. The focus of the teacher is to work closely with students to provide them with a wide range of opportunities to develop their self-regulation.
- DOMAIN 4: Teacher as a MOTIVATOR this domain requires the teacher to use assessment tasks and assessment information to enhance students' motivation. The aim of the teacher is to provide differentiated instruction and assessment to address individual students' learning needs and motivation.

(Alonzo, Davison, 2013)

The tool developed by Alonzo and Davison (2013) explores the emerging AfL practices of teachers. More particularly the tool focuses on the indicators of teachers' effective AfL practices.

In addition, the tool allows for an evaluation of the standards of performance for each stage of teacher professional growth.

Alonzo (2013) describes the purpose of the Teacher AfL Competence Tool in the following way.



"This assessment instrument is part of a process designed to help teachers improve their use of Assessment For Learning (AfL) in improving student learning and achievement. As with AfL for students, the assessment instrument can be used for self and peer assessment and for school leader direct assessment.

- in self-assessment, teachers can identify what they believe to be their current level of AfL competency and so identify the next sets of skills they need to develop to move to the next competency level;
- in peer-assessment, colleagues can provide their perception of fellow teachers' current AfL competency levels based on their observation of classroom practices and other information provided by the colleague being assessed. They can also identify opportunities for assisting colleagues seeking further development and for learning from those teachers already well-advanced in AfL competency development and classroom practice
- in direct assessment, school principals/heads can use the instrument to assess the current level of individual teachers AfL competence. From the results, they can identify the support required by each teacher including appropriate professional development." (p.214)

See below a copy of the instrument adapted for the School's purpose under in the appendix section.

An explanation of the data collected through this tool will be discussed in the following section of this report.

On teacher quality

In addition to good pedagogical approaches, the impact of effective teaching has been highlighted as the most significant in-school factor influencing student achievement (Hattie, 2003). As expressed by Wright, Horn, & Sanders, (1997),



"... the most important factor affecting student learning is the teacher. ... The immediate and clear implication of this finding is that seemingly more can be done to improve education by improving the effectiveness of teachers than by any other single factor."

Hattie (2009) moreover, states that it is teachers seeing learning through the eyes of students and students seeing teaching as the key to their ongoing learning that brings about significant improvement in learning. Hattie asserts,

"the current mantra is that teachers make the difference. This is not quite right - it is some teachers undertaking certain teaching acts with appropriately challenging curricula and showing students how to think or strategize about curricula. Not all teachers are effective, not all teachers are experts, and not all teachers have powerful effects on students. The important consideration is the extent to which they do have an influence on student achievements, and what it is that makes the most difference". (Hattie, 2009. p.34)

In the context of the Australian Institute for Teaching and School Leadership (AITSL), the institute and its Standards for teachers, places the improvement of classroom practice is a critical aspect of the Australian Teacher Performance and Development Framework. AITSL argues that "every day in classrooms across Australia teachers are assessing what their students know and what they still need to know, based on their expert content knowledge and understanding of their students and how they learn. This knowledge base enables them to understand where their students are currently situated on a particular learning pathway and to know what to do to move the learning forward." (http://www.aitsl.edu.au/classroom-practice)

It would follow then that, and as argued by Heritage (2007) and Heritage et al. (2009), there is an obvious need for teachers to acquire the expertise required to be able to assess students' prior knowledge, and the skills to effectively plan for the next stage of instruction. Saddler (1989) found that teachers without the adequate level of competence in implementing Assessment For Learning practices effectively could affect students learning negatively.



Moreover, the variability in the quality of teaching practice amongst schools and within a school is a matter of concern. John Hattie (2015) cites the OECD report from 2010 and points out that "the variability between schools is 36 per cent, while the variance within schools is 64 per cent." (p.1) While the argument is not necessarily that some teachers are bad and others are good, Hattie does emphasise the need to ensure that all teachers have the same positive impact on student learning. He says, "the greatest influence on student progression in learning is having highly expert, inspired and passionate teachers and school leaders working together to maximise the effect of their teaching on all students". (p.2)

Then there is the question of teacher variability amongst teachers in the different subject areas. In the typical Secondary school organizational subject groupings into Departments, teacher variability could be seen as a further reason for concern. Siskin's (1994) study of Departments in the Secondary setting found that "each department does provide a distinct focus to the ways in which teachers tend to view their school, their students, and their own practice. Subject departments ... [are] worlds of their own, with their own 'ethnocentric way of looking at' things." (p.181) Siskin concludes that while subject departments may not necessarily be the best organizational structure for a school, it is important to consider their place and power in any attempt to improve school effectiveness as "they are deeply embedded in the social, political, and intellectual structures of high schools as institutions and teaching as an occupation." (189)

For this reason, this study will investigate the extent to which implementing Assessment For Learning practices as a whole school approach to teaching and learning is an effective way of reducing variability amongst the effectiveness of teachers and variability amongst teachers from different subject departments in a High School setting.

This study will evaluate the extent to which teachers' classroom practice has been improved as a result of their engagement in professional learning sessions and their classroom implementation of the agreed Assessment For Learning practices. These agreed practices will be based on Wiliam's (2011) schema discussed above.

This research project at the School puts teaching quality practice at the centre of the school's aims. It is intended that improvements in quality teacher practice will be achieved through a formative process of professional collaboration in response to analysing information on students' progress.



The focus of teacher professional learning on formative approaches will include developing expertise on,

- Clarifying learning intentions and success criteria
- Engineering effective classroom experiences to elicit evidence of student learning
- Providing quality feedback to move students forward in their learning
- Activating students as resources for one another
- Activating students as owners of their own learning, and
- Analysing the data collected to inform the next stage of planning for learning.

The school believes that it is through an effective implementation of these principles and strategies that ASG will become a Formative, Student-centred learning environment where students' academic and social outcomes can improve. This vision is captured in the image below.



J. Rodriguez - Adapted from Dinham, (2008)

This vision places significance on the development of the student in a holistic manner. Student engagement in educational experience is an essential part of ensuring improvement in all areas of their lives. In order to promote engagement the provision of quality learning opportunities is an imperative. It is within this formative vision that the project to develop and implement an



Assessment For Learning Framework for pedagogy becomes a core element of the School's direction.



Methods and Data Collection Approaches

This study used a multi-method research design. Both quantitative and qualitative data was gathered using various instruments designed for the purpose of this project. Using Knupfer and McLellan's concept of 'Descriptive Research' in (David, (Ed), 2001), this project has attempted to describe what is the situation in regards to improvements to teacher professional practice after a period of engagement in professional learning sessions

In the early phase, an evaluation of the school's overall effectiveness was conducted. This evaluation was intended to identify teachers' perceptions on the quality of the school operation, in particular, the impact of the school direction on the quality of teaching and learning in the school. For the purpose of this overall evaluation, Masters (2012) National School Improvement Tool (NSIT) was used. This tool is designed to help school reflect on their attempts to improve the quality of teaching and learning taking place in their classrooms. This approach was used as a starting point for identifying teacher perceptions of the effectiveness of the school's operation. The National School Improvement Tool covers nine domains of school operation. They are,

- 1. An Explicit Improvement Agenda
- 2. Analysis and Discussion of Data
- 3. A Culture that promotes Learning
- 4. Targeted use of School Resources
- 5. An Expert Teaching Team
- 6. Systematic Curriculum Delivery
- 7. Differentiated Teaching and Learning
- 8. Effective Pedagogical Practices
- 9. School Community Partnerships

While the instrument is intended to assess Leadership for Improvement, the tool is a useful instrument for the purpose of assessing school effectiveness. The NSIT describes school effectiveness into four bands or levels of effectiveness; each level of effectiveness offers criteria that capture the expectations of that level.





The four levels are:

- Outstanding
- High
- Medium
- Low

Working collaboratively, teachers were asked to familiarize themselves with the NSIT, discuss its domains, and its descriptors for each level. Teachers were then asked to offer an evaluative impression of the current school operation against the descriptors of the NSIT.

| An Evidence-Based Framework for School Improvement – R | enective Practice. Now enective is our school |
|--|---|
| | |
| omain: | |
| ocus of the Domain (Summarise the group's understanding) | NW N |
| | |
| | 1.5 |
| | |
| | |
| | mme 2 |
| ating of school effectiveness in the Domain: (Group's consensus) | |
| ating of school effectiveness in the bolham. (choup's consensus) | |
| | |
| ist Evidence to Justify Rating: | |
| | |
| | |
| | |
| | |
| | |
| | |
| Vhat do we learn from this exercise about the school operation? | 151 |
| | |
| | |
| 5 | I NY |
| | KP |

This initial school effectiveness evaluation provided significant evidence for the need to initiate a methodical process of improvement across all aspects of the school operation.

In addition to the NSIT the school conducted a survey on teachers' impressions of the school culture. There is substantial research linking school culture with student achievement. As C. Wagner (2006) puts it, "Phillips (1996) conducted more than 3,100 school culture assessments from 1981 to 2006 and found compelling anecdotal evidence to suggest that the connection



between school culture and student achievement is a reality, and that culture influences everything that happens in a school. For this reason, ASG found it necessary to use the School Culture Triage Survey, developed and refined by Phillips (1996), Phillips and Wagner (2002), and Wagner and Masden-Copas (2002), as a tool to gain an impression of teacher perception of the school culture. Using a 1 to 5 scale the School Culture Triage Survey focuses on three 'culture behaviors' in a school context. These culture behaviors are,

"**Professional Collaboration**: Do teachers and staff members meet and work together to solve professional issues—that is, instructional, organizational, or curricular issues?

Affiliative Collegiality: Do people enjoy working together, support one another, and feel valued and included?

Self-Determination/Efficacy: Are people in the school because they want to be? Do they work to improve their skills as true professionals or do they simply see themselves as helpless victims of a large and uncaring bureaucracy?"

(Wagner, 2006)

See a copy of the adapted survey for our School's purpose in the Appendix section:

As a result of the learning made from the analysis of teachers' responses to these two items, the school embarked on a Professional Learning journey where all teachers, Primary and Secondary, were included. These Professional Learning sessions were focused on reviewing and re-learning understandings about assessment of student learning, and on developing teacher expertise on the implementation of Assessment For Learning principles and practices to all aspects of their teaching and assessment of students. A major focus of these professional learning sessions was the five strategies of Assessment For Learning in Wiliam's schema. These AfL strategies are,

- Clarifying and Sharing learning intentions and success criteria
- Engineering effective classroom discussions, tasks and activities that elicit evidence of learning
- Providing feedback that moves learners forward
- Activating students as resources for one another
- Activating students as owners of their own learning

A discussion about these five core strategies gave scope for a very broad array of professional learning topics and activities aimed at evaluating and reflecting on current practice, developing further depth of knowledge and skills on the factors that affect student learning, and modifying



teacher practice. A breakdown of the various stages of the project and the professional learning component in it is presented later in this report.

Furthermore, Alonzo and Davison (2013) Teacher Assessment For Learning Competence tool was utilized with a dual purpose in mind. Firstly, it was intended as a self-evaluation exercise for teachers. Secondly, the research team and the school leadership wanted to ascertain initial teacher perception of their levels of competence on the various domains of the framework. This tool will be utilized again at a later stage in the implementation of Assessment For Learning to gain an impression about the impact engagement in professional learning sessions may have had on teachers' perception of their own practice and their students' learning.

Moreover, the research design incorporated a process of teacher self-evaluations and peerevaluation of teaching practice. This process was referred to as Open to Learning Conversations, and was intended for teachers and the school leadership to gain an impression about the progress achieved on teachers' levels of expertise in AfL classroom practices. The Open to Learning Conversations process involved teachers filming their own lessons for the purpose of selfevaluation. The school invested on Swivl technology to ensure teachers could feel comfortable that their privacy was preserved, as they would have control over their own individual on-line Swivl accounts. The second stage of Open to Learning Conversations involved peer-lesson observations. In this second stage teachers were asked to invite a colleague they felt comfortable with to come into their lessons to observe and give them feedback. A third stage of this process involved the Heads of Department observing colleagues in their teams and providing them with feedback on their practice. The template used to document the observation process is attached to this report.

In addition to the focus on teachers and their practice, the project was interested in collecting information about students' perceptions of teacher classroom practice. With this purpose in mind the research team developed a Student Feedback Survey on Teacher Implementation of AfL Practices. The structure of this survey was designed to follow the five strategies of Assessment For Learning that have been the focus of the professional learning session in the first eight months of the project, as discussed earlier. A group of fifty randomly selected students from years 5 to 11 were asked to complete the survey.


One year and six months into the project the school conducted another round of student feedback survey. This time, the research team adapted an existing instrument and labeled it Student Evaluation of Accomplished Teaching Scale, based on The Irving Student Evaluation of Accomplished Teaching Scale (Appendix F, Hattie, 2012). This survey was considered to be a useful tool to collect feedback from students as it covers various areas of teaching practice that are in line with the School's preferred formative approaches to teaching.

The survey asks for students to evaluate the extent to which they agree with a given statement using a 1-5 scale. The areas covered by the survey are,

- Teacher commitment to students and their learning
- Pedagogy in the subject
- Student engagement with the curriculum
- Relationship between subject and the real world

Students from year 2 to year 12 were asked take part in the survey. The survey was modified significantly to make it accessible for Primary school students in years 1 to 4. In the Secondary school setting, teachers had two of their classes take the survey. The classes were randomly selected.

In the final stage of this research, a survey will be administered intended to specifically measure teacher perceptions on the impact that implementing Assessment For Learning practices has had on their teaching and learning. This survey has been labeled Evaluation of AfL Implementation – Questionnaire. It asks teachers to rate the extent to which their participation in the process of professional learning at ASG has resulted in improvement in the areas of Teacher Practice, and Improvement in Student Learning.

All surveys were designed using Google Forms using a school owned Google Drive account. The school's Leadership were the only people with access to the data collected. This form was considered teacher and student friendly as it provided easy access to the materials as well as ensuring the integrity and confidentiality of the information gathered.

The various points at which data has been collected followed a period of teacher training through



regular professional learning sessions where core principles and strategies of Assessment For Learning were discussed to ensure further depth of understanding and effective implementation.

In the context of our research project all instruments such as surveys and templates, as well as the process of implementation, were discussed at the research team level and also as part of the professional learning with all teachers. The exercise of developing instruments, adapting and modifying tools, refining processes, leading professional learning sessions, were all part of the process of building professional capital, as this has been the key focus of this project.



Participants of the Study

The school's teaching staff consists of a committed group of professionals, some who have served the school for the majority of their teaching career, while others are just beginning their service at the school. While the School did not have an explicitly stipulated approach to instruction, its classrooms could be described as being teacher-centred in the approach to teaching, with students relying heavily on the explicit teaching and guidance of their teachers.

Given that his project will examine the impact of implementing of formative practices on the effectiveness of teachers' classroom practice across the whole school, all classroom teachers will participate in the study. Participants will include 50 teachers of which 26 are Primary School teachers and 24 Secondary School teachers. The group is comprised of 31 female teachers and 19 male teachers. There is a variety of professional experience amongst the participants. Some teachers have been teaching at this school for 24 years; the majority of the participants have an average teaching experience of 12 years, with a few of the participants in their first year of their career.

The implementation of the Assessment For Learning approach actively engaged all teachers at the school in an Action Research approach to professional learning. The reason for this choice of approach is that Action Research lends itself very well to the nature of the implementation process. According to Bartlett & Burton, (2006) Action Research arises from practical questions, is participatory in nature, and its validity is strengthened through peer examination and discussion. Stringer (2007) defines Action Research in the following way,

"Action research is a reflective process of progressive problem solving led by individuals working with others in teams or as part of a "community of practice" to improve the way they address issues and solve problems." (Keengwe, 2014, p101)

In particular, the project will use Spears & Skrzypic (2012) model of Action research, which they describe as cyclic. This approach is illustrated in the image below.





(Spears & Skrzypic (2012))

In light of the research focus, this project engaged teachers in individual and collaborative professional learning. The model played an intrinsic part in guiding each stage of implementation.

The project involved all teachers in:

- A process of self-evaluation
- Classroom practice evaluation through peer observation using the Open to Learning Conversation process
- Teacher evaluation of student engagement

In addition, students have been involved in:

- A process of reflecting on their learning,
- Evaluating classroom practice, and
- Assess the impact of teacher practices on their learning.



The implementation of the project was organised in stages, intended to identify and focus on the different aspects of Assessment For Learning. This has been done in order to develop deep understanding of each Assessment For Learning focus area and its implementation. Below is a brief description of each stage.

Stage 1:

- **Collaborative strategic planning:** Meeting with whole staff to review Annual Improvement Plan. Quality Teaching identified as a key priority for improvement within the Improvement Plan.
- **Reviewing Key Focus Area**: the Implementation of Assessment For Learning as framework for pedagogy at the School.
 - Professional Learning:
 - Introduction to key principles and strategies of Assessment For Learning The Research.
 - Teacher self-evaluation surveys based on Alonzo and Davison (2013) Assessment For Learning Teacher Competence Tool: Teacher as Assessor, Teacher as Pedagogy Expert, Teacher as Learning Partner, and Teacher as Motivator.

• Collaborative professional learning:

- Initial surveying: Evaluating current practice Use of National School Improvement Tool, and including teacher self-evaluation, and student surveys of classroom learning experience
- o Analysis of survey data, and feedback to whole staff
- Analysis of existing performance data from in-school assessments and standardised tests (NAPLAN, HSC)
- o Professional Learning: Engaging with the research/Literature on AfL
- o Formulating action plan based on AfL focus.
- Engaging with Assessment For Learning focus
 - Professional Learning:



- Reviewing the nature and design of Assessments
- Understanding the Formative role of assessments
- Understanding the feedback that assessments offer about teaching practice and student learning,
- Collaborative reviewing, planning and programming for implementation

Professional Learning:

• Understanding the place and value of **Learning Intentions and Success Criteria** as an initial step of implementation of AfL.

• Professional Learning:

• **Introducing Open to Learning Conversations (OtLCs):** Discuss this process and instrument for peer observation of classroom practice. The instrument will be used to collect data on teacher practice as well as allowing for peer feedback.

• Evaluating progress

- Develop surveys to evaluate the impact on classroom practice, teacher effectiveness and student engagement,
- o Surveying teachers and students
- Analyse survey responses
- Develop action plan in response to data

Stage 2:

- Evaluating students response to Learning Intentions through a student survey,
- Engaging with Assessment For Learning focus:
 - **Professional Learning**: Understanding the Engineering effective discussions, tasks and activities that elicit evidence of learning,
 - Collaborative planning and programming for implementation
- Engaging with Assessment For Learning focus:
 - Professional Learning: Providing feedback that moves learners forward,
 - Reviewing the research on feedback



- Understanding effective ways of providing feedback to students,
- Collaborative planning and programming for implementation

• Evaluating progress

- Develop surveys to evaluate the impact on classroom practice, teacher effectiveness and student engagement,
- o Surveying teachers and students
- o Analyse survey responses
- Develop action plan in response to data

Stage 3:

- Engaging with Assessment For Learning focus:
 - o Professional Learning: Activating students as learning resources for one another,
- Engaging with Assessment For Learning focus:
 - **Professional Learning:**
 - Activating students as owners of their own learning,
 - Understanding metacognition and developing strategies to teach students to develop metacognitive skills,

• Professional Learning:

- Collaborative planning and programming for implementation
- Evaluating progress
 - Develop surveys to evaluate the impact on classroom practice, teacher effectiveness and student engagement,
 - o Pilot survey
 - o Surveying teachers and students
 - o Analyse survey responses
 - Develop action plan in response to data

Stage 4:

- Collaborative professional learning:
 - Engaging all staff members in a process of evaluation and reflection on the progress of implementing AfL practices,



- o Assessing the progress of achieving the aims of the project
- Reflect on the impact of research project of the overall school effectiveness.
 - Use National School Improvement Tool's descriptors to assess progress,
- Prepare a report for the school community

While the project has been designed to take place in various stages, it was obvious that an incremental overlapping of skills and knowledge from stage to stage needed to be integrated. As such, the stages are not to be seen as independent of each other but rather as a way of organising and monitoring the progress of the project.

It must be mentioned here that, as mentioned earlier, the school's preferred method of analysis was to use a descriptive methodology. That is, data was collected in order to form a description about what progress, if any had been made. The purpose of the collection of data was to inform the next stages of the project. The data collected was firstly discussed in the research team meetings. This discussions was then followed by whole staff discussion of the data gathered so that all teachers could contextualise the professional learning sessions as a response to the information gathered from the various surveys and other tools of data collection.

Results and Findings

The aim of this research project was to build teacher capacity, on the basis of the implementation of Assessment For Learning as a pedagogical framework, to impact student learning. This aimed required an intervention program of professional learning that responded to the needs of the school context. These needs were identified through various forms of data collection involving teachers and students.

The initial steps involved collecting data of teacher perception of the school's effectiveness and their perceptions of the school's culture. Using the National School Improvement Tool familiarisation activity discussed earlier, the consensus amongst teachers was to rate the school in the Medium to Low levels of the tool's descriptors.



| National School Improvement Tool – Teacher Evaluation of School Effectiveness – | |
|---|--------------------------|
| Teachers Group Responses | |
| Domain | Teacher Consensus - Rate |
| 1. An Explicit Improvement Agenda | Low |
| 2. Analysis and Discussion of Data | Low |
| 3. A Culture that Promotes Learning | Low |
| 4. Targeted Use of School Resources | Medium |
| 5. An Expert Teaching Team | Medium |
| 6. Systematic Curriculum Delivery | Medium |
| 7. Differentiated Teaching and Learning | Medium |
| 8. Effective Pedagogical Practices | Low |
| 9. School Community Partnerships | Medium |

The school also asked teachers to complete the School Culture Triage Survey to gain a description of teachers' perception about the School's culture in response to Phillip's (1996). A copy of the survey as adapted for the School's purpose can be found in the Appendix section of this report.

Below is a summary of teachers' responses:



School Culture Triage Survey (Phillip, 1996) – Summary of Responses (November 2015)

Professional Collaboration

Teachers and staff discuss instructional strategies and curriculum issues.

39 responses



Teachers and staff work together to develop the school schedule.





Teachers and staff are involved in the decision-making process with regard to materials and resources.

39 responses



The student behaviour code is a result of collaboration and consensus among staff.

39 responses



The planning and organisational time allotted to teachers and staff is used to plan as collective units/teams rather than as separate individuals.





Affiliative Collegiality

Teachers and staff tell stories of celebrations that support the school's values.

39 responses



Teachers and staff visit/talk/meet outside of the school to enjoy each others' company.

39 responses



There is rich and robust tradition of rituals and celebrations including holidays, special events and recognition of goal attainment.





Our school schedule reflects frequent communication opportunities for teachers and staff.

39 responses



Our school supports and appreciates the sharing of new ideas by members of our school.

39 responses



Our school reflects a true 'sense' of community.





Self-Determination/Efficacy

When something is not working in our school, the faculty and staff predict and prevent rather than react and repair.

39 responses



School members are interdependent and value each other.

39 responses



Members of our school community seek alternatives to problems/issues rather than repeating what we have always done.





Members of our school community seek to define the problem/issue rather than blame others.

39 responses



The school staff is empowered to make instructional decisions rather than waiting for supervisors to tell them what to do.

39 responses



People work here because they enjoy and choose to be here.





Having identified various areas for improvements out of this initial data collection the school leadership in discussion with the research team formulated a plan of action. This plan of action focused primarily on the Professional Learning strategy the school would adopt in order to achieve its aim of building teacher capacity on Assessment For Learning while improving the school's collaborative culture in the process of building pedagogical expertise.

This plan was presented to all staff at the beginning of 2016. The process of professional learning started at the beginning of that year. Once teachers were introduced to the Assessment For Learning Framework, its principles and practices, an initial teacher self-evaluation was conducted on the first domain, Teachers as Assessors, of Alonzo & Davison (2013) tool, Assessment For Learning Competency Framework. The survey was conducted during a professional learning session, in March of 2016. Responses were anonymous.

The competency framework provides criterion for this evaluation in an A-E scale with the following descriptors:



Alonzo & Davison (2013) Assessment For Learning Competency Framework

| Performance Levels | Descriptions of Teacher's Classroom Performance |
|-----------------------|--|
| A | Performs basic tasks required in implementation. Application is limited and generally mechanistic. Implementation 'rules' are followed in a step-by-step way without with limited consideration of the context in which optimal teaching and learning occurs. AfL is seen as a somewhat limited and inflexible set of skills applicable in all situations. |
| В | Demonstrates acceptable performance characterised by personal development of an AfL implementation routine based on recurring situations. In new or novel learning situations, some critical implementation elements are typically omitted. |
| С | Deliberately plans AfL implementation. The implementation is more effective and organised as a result of clear strategies and mechanisms. New situations and contingencies in the learning process are managed effectively. Teacher is using a wide range of AfL activities. |
| D | Implements AfL in a holistic way. All components of AfL are incorporated in a coherent way across the whole process of students' learning that makes sense to both students and parents/carers. Important decisions through assessment and evaluation of the different issues in learning and teaching are made to help develop better strategies and approaches in learning, teaching and assessment. |
| E | Easily adjusts the implementation of AfL in various situations with implementation relying on his/her perception of each learning and teaching situation. At this level, the teacher is also providing expert AfL leadership, advice and support to colleagues. |

(Alonzo, & Davison, 2013)

A copy of the survey adapted for the school's purpose can be found in the Appendixes section of this report.



Below is a summary of teachers' responses to the survey.

Alonzo & Davison (2013) Assessment For Learning Competency Framework – Survey: Teachers as Assessors Summary of Responses – March 2016

Development of Assessment Tasks

Develops appropriate assessment strategies

47 responses



- A. Develops assessment strategies but limited to measuring student lea...
- B. Develops assessment strategies to measure learning outcomes and to...
- C. Develops a range of assessment strategies which put assessment as...
- D. Evaluates the suitability of the assessment strategies
- E. Provides engaging professional assistance to colleagues in developi...

Designs assessment tasks



- A. Designs generic assessment tasks
 B. Designs inclusive assessment tasks
 C. Designs differentiated and multidimensional assessment tasks that allow students to demonstrate their...
- D. Evaluates the suitability of the differentiated assessment tasks dev...
- E. Provides training to colleagues in designing differentiated assessment...



Measurement of Students

Uses a range of assessment methods

47 responses



Gathers a range of evidence of students' learning



- A. Gathers limited evidence to determine the extent to which stude...
- B. Gathers evidence of students' learning to determine how they are...
- C. Gathers evidence of students' learning across four dimensions an...
- D. Assesses the usefulness of evidence of students' learning progr...
 E. Demonstrates to colleagues expert
- ways of gathering a range of eviden...



Uses rubrics to assess students' learning

47 responses



Records evidence of student's learning progress and performance



- A. Records evidence of students' achievement
- B. Organises evidence of students' learning to show the improvement o...
- C. Uses several strategies in recording students' learning to effec...
- D. Evaluates the effectiveness of the recording strategies in showing lear...
- E. Provides expert assistance to colleagues in recording students' le...



Ensuring Trustworthiness of Assessment

Considers factors that affect students' performance (length of assessment, suitability of task, language, design, readiness of students)

47 responses



personality, physical condition or knowledge of irrelevant background information)

47 responses



Establishes dialogue/ conversation with colleagues to ensure consistent, fair and comparable judgment of students' learning(engages in standardisation)





The same survey was conducted the following year, in May of 2017. By this time, the school had done significant work on engaging teachers in professional learning so the research team wanted to gather information about teachers' perceptions about the role as Assessors. There was an expectation that there would be considerable improvement on the various aspects of this domain of the Teacher Competency Tool.

The results of the survey are summarised below:

Alonzo & Davison (2013) Assessment For Learning Competency Framework – Survey: Teachers as Assessors Summary of Responses – May 2017

 A. Develops assessment strategies but limited to measuring student lea...
 B. Develops assessment strategies to

measure learning outcomes and to ...

 C. Develops a range of assessment strategies which put assessment as...

D. Evaluates the suitability of the assessment strategies
E. Provides engaging professional assistance to colleagues in developi...

Develops appropriate assessment strategies

47 responses



Designs assessment tasks





Measurement of Students

Uses a range of assessment methods

47 responses



Gathers a range of evidence of students' learning

47 responses





47 responses



- A. Uses valued expertise in assessing student learning
- B. Uses rubrics to assess student learning

A. Gathers limited evidence to

determine the extent to which stude...
B. Gathers evidence of students' learning to determine how they are...
C. Gathers evidence of students' learning across four dimensions an...
D. Assesses the usefulness of

 evidence of students' learning progr...
 E. Demonstrates to colleagues expert ways of gathering a range of eviden...

- C. Uses rubrics and valued expertise to identify student learning opportun...
- D. Reviews the effectiveness of rubrics against valued expertise in a...
- E. Provides expert assistance to colleagues in effectively using rubrics



Records evidence of student's learning progress and performance

47 responses



Considers factors that affect students' performance (length of assessment, suitability of task, language, design, readiness of students)

47 responses



Avoids interference in task completion (e.g. ability to read, write, personality, physical condition or knowledge of irrelevant background information)





Establishes dialogue/ conversation with colleagues to ensure consistent, fair and comparable judgment of students' learning(engages in standardisation)

47 responses



A second Domain of the Framework that was considered important to evaluate was Teachers as a Motivator. In a similar timeframe as the previous, teachers were asked to complete the survey. Below is a summary of their responses.

Alonzo & Davison (2013) Assessment For Learning Competency Framework – Survey: Teachers as a Motivator Summary of Responses – March 2016

ADAPTATION OF TEACHING

Uses a variety of teaching and learning methodologies





Uses flexible teaching processes

49 responses



- A. Delivers the lesson with strict adherence to the plan
- B. Analyses assessment results and uses it to adjust teaching methods
- C. Uses assessment results and other sources of information to adjust tea...
- D. Outlines information on the effectiveness of the different source...
- E. Leads colleagues in using assessment and other assessment i...

DEVELOPMENT OF ENVIRONMENT THAT VALUES INDIVIDUAL LEARNERS

Conducts assessment with consideration of student background and culture.





Develops an environment of trust

48 responses



Ensures openness in the class

48 responses





- B. Initiates ways to develop classroom openness
- C. Creates an environment where students are confident in sharing th...
- D. Evaluates classroom activities and identifies those that enhance appro...
- E. Demonstrates to colleagues ways to ensure openness in the class

Uses assessment to build students' interest to learn

42.3%

40.4%



- A. Identifies signs of students' becoming disinterested in their lear...
- B. Uses assessment to build up students' interest in learning
- C. Employs several assessment activities to sustain students' interes...
- D. Evaluates the effectiveness of assessment activities that build up s...
- E. Demonstrates to colleagues best practices in building students' intere...



Demonstrates belief in the ability of every student to improve

49 responses



- A. Advises low performing students to undertake remedial instruction
- B. Works regularly with low performing and with learning needs...
- C. Uses several strategies to help individual students improve their lea...
- D. Identifies the best approaches for helping individual and different grou...
- E. Models to colleagues positive attitudes that demonstrate the belief...

DIRECTING STUDENTS TOWARDS GOAL ATTAINMENT

Affirms students' good performance







Clarifies students misconceptions

48 responses



Reinforces positive learning attitude of students



- A. Identifies students' positive learning attitudes
- B. Provides activities which enhance students' positive learning attitude
- C. Employs several strategies for reinforcing students' positive attitud...
- D. Provides information related to the effectiveness of various strategies f...
- E. Models to colleagues various ways for reinforcing positive learning attit...



Alonzo & Davison (2013) Assessment For Learning Competency Framework – Survey: Teachers as a Motivator Summary of Responses – May 2017

ADAPTATION OF TEACHING

Uses a variety of teaching and learning methodologies

47 responses





```
    B. Uses culturally relevant and
interesting teaching and learning m...
```

```
C. Develops or innovates a range of 
relevant and interesting teaching an...
```

D. Assesses the effectiveness of teaching methods developed and u...

E. Provides support to colleagues on how to develop, innovate and use a...

Uses flexible teaching processes



- A. Delivers the lesson with strict adherence to the plan
 B. Analyses assessment results and
- uses it to adjust teaching methods
- C. Uses assessment results and other sources of information to adjust tea...
- D. Outlines information on the effectiveness of the different source...
- E. Leads colleagues in using assessment and other assessment i...



DEVELOPMENT OF ENVIRONMENT THAT VALUES INDIVIDUAL LEARNERS

Conducts assessment with consideration of student background and culture.

47 responses



Develops an environment of trust



- A. Builds mutual trust and good rapport with students
 B. Identifies and addresses factors
- that inhibit students' trust
- C. Provides activities that promote trust between and amongst student...
- D. Evaluates the effectiveness of activities that promote trust amongs...
- E. Shares with colleagues effective ways to develop an environment of...



Ensures openness in the class

48 responses



Uses assessment to build students' interest to learn

48 responses



Demonstrates belief in the ability of every student to improve

48 responses



- A. Advises low performing students to undertake remedial instruction
- B. Works regularly with low performing and with learning needs...
- C. Uses several strategies to help individual students improve their lea...
- D. Identifies the best approaches for helping individual and different grou...
- E. Models to colleagues positive attitudes that demonstrate the belief...

ſ



DIRECTING STUDENTS TOWARDS GOAL ATTAINMENT

Affirms students' good performance

48 responses





Clarifies students misconceptions



- A. Identifies students' misconceptions about the lesson
- B. Follows through students' progress in correcting their misconceptions a...
- C. Uses a wide range of strategies to address students' misconceptions a...
- D. Assesses the effectiveness of various strategies in addressing stu...
- E. Helps colleagues to use various strategies in addressing students' m...



Reinforces positive learning attitude of students

48 responses



Teachers' responses to the two iterations of these domains of the survey demonstrate significant increase on the number of teachers feeling more confident on the practice of the role of Assessor and Motivator. While no cause and effect relationship between the professional learning sessions and the improvement in teacher perception can necessarily be established out of these responses, the data collected provided enough basis to assume that what the school was doing was having a positive influence on teachers' perception of their practice.

Students' perception about the practical ways in which teachers were implementing AfL practices in the classroom was also surveyed. As discussed earlier, an instrument was developed and administered to a randomly selected group of 50 students from Year 6 to Year 11. Students' responses confirmed a positive uptake of AfL practices in the classroom. See summary below.



Student Survey on Teacher Implementation of Assessment For Learning Practices

The teachers make it clear ALL THE TIME what it is we will learn about during the lessons.

49 out of 50 people answered this question



The teachers give clear explanations of the criteria that indicate whether or not I have achieved the learning.

49 out of 50 people answered this question





The teachers check whether I have understood the learning intention.

48 out of 50 people answered this question



The teachers make sure that I understand how well my work meets the success criteria.

 Average: 3.56

 1
 2
 3
 4
 5

 Strongly Disagree
 Strongly Agree

 ▶ Hide detail
 14 / 29%

 4
 13 / 27%

 5
 13 / 27%

 1
 4 / 8%

48 out of 50 people answered this question

4/8%


The teachers design activities that help me understand the learning I am meant to gain.

49 out of 50 people answered this question



The teachers design activities that use different methods (technology, canvas, class discussions, group work, independent work) that keep me engaged and interested in the learning.





The teachers design lesson activities that include checking whether I am achieving the learning according to the success criteria.

49 out of 50 people answered this question



The lessons are:

| 1 | at a level that pushes me and provides me with an opportunity for growth. | 25 / 51% |
|---|---|-----------------|
| 2 | at an appropriate level for my understandin <mark>g.</mark> | 21 / 43% |
| 3 | too easy and make me feel bored. | 3 / 6% |
| 4 | too difficult and make me feel anxious. | 0 / 0% |



The teachers check whether I understand the feedback provided.

49 out of 50 people answered this question



The teachers provide feedback within a reasonable timeframe.





The teachers check whether I used the feedback to improve my learning according to the success criteria.

49 out of 50 people answered this question



The teachers make changes to their style of teaching and to the activities in response to students' levels of performance.





The teachers design activities that allow me to interact with other students to achieve the intended learning.

49 out of 50 people answered this question



The teachers provide a variety of activities (pair and group) that allow me to share my ideas/opinions, and learn from my peers.





The teachers have provided me with the skills and knowledge that make me feel confident to complete learning activities independently.

49 out of 50 people answered this question



The teachers have provided me with the skills and knowledge to competently make judgments about whether I am achieving the learning according to the success criteria.

| | | | | | Average: 3.98 | | |
|---------------------------------|---|---|---|---|-----------------|--|--|
| | 1 | 2 | 3 | 4 | 5 | | |
| Strongly Disgree Strongly Agree | | | | | | | |
| ► Hide detail | | | | | | | |
| 4 | | | | | 22 / 45% | | |
| 3 | | | | | 14 / 29% | | |
| 5 | | | | | 13 / 27% | | |



The teachers have given me enough guidance to feel confident that I can perform tasks at a high standard on my own.

49 out of 50 people answered this question



The teachers have shown me examples of how to undertake tasks independently.



48 out of 50 people answered this question

The responses given by students were discussed at research team meetings and with all teachers at professional learning session following the administration of the survey.



As stated earlier, the purpose of this survey was not to find a causal relationship between professional learning session and teacher practice, but rather to ascertain the extent to which students were experiencing teacher implementation of AfL practices.

In addition, The Irvin **Student Evaluation of Accomplished Teaching Scale** was adapted after discussion with the research team and all teachers. The final version below is the result of this consultation process.

The administration of the survey involved students from Primary and Secondary students. All teachers had their classes surveyed. Secondary teachers had two of their classes completing the survey. Research team members administered the survey and students were guided through the questions to ensure that they understood the terms of the questions. The survey was administered using Google Forms.

A copy of the full survey can be found in the Appendixes section of this report.

It would be near impossible to report on the results of this survey for every teacher at ASG. For the purpose of this report it may suffice to show the type of data collected so that the reader can get an impression of data with which the school is working. Once again, this data is collected with a descriptive purpose in mind. The school is interested in understanding how things are progressing rather than a meticulous statistical analysis of any sort.



Sample data collected on teacher X and teacher Y shown below.

Commitment to students and their learning

This teacher is committed to the learning of all the students in the class.

36 responses



This teacher adjusts the lesson if we experience difficulties in learning. ³⁶ responses



This teacher enables us to develop confidence and self-esteem in this subject.





This teacher uses assessment results to provide extra help/extension to appropriate students.

36 responses



This teacher creates a positive atmosphere in class in which we feel part of a team of learners.

36 responses



This teacher provides time for us to reflect and talk about the concepts that we are learning.





Pedagogy in this subject

This teacher encourages us to test ideas/take risks and discover new ideas in this subject.

36 responses



This teacher develops our ability to think and reason in this subject. ³⁶ responses



This teacher encourages us to try different techniques to solve problems/complete tasks.





This teacher encourages us to place a high value on this subject.

36 responses



This teacher tells us what the purpose of each lesson is.

36 responses



This teacher knows and caters for the problems that we commonly encounter in learning new topics.





This teacher helps us construct an understanding of the language and processes of this subject.

36 responses



Student engagement with the curriculum

This teacher challenges students to think through and solve problems/complete tasks, either by themselves or together as a group. ³⁶ responses



This teacher makes the subject interesting for me.





This teacher makes learning this subject satisfying and stimulating.

36 responses



This teacher makes this subject come alive in the classroom.

36 responses



This teacher shows us interesting and useful ways of solving problems/completing tasks.





Relationship between subject and the real world.

This teacher helps the class to understand how this subject relates to the real world.

36 responses



This teacher helps us to make the links between the different topics of this subject and other aspects of our lives.





This teacher prepares us for adult life by helping us to see how important this subject will be to our careers and to everyday life.

36 responses



This teacher teaches us about the way in which this subject contributes to changes in society, and the way in which society has changed this subject.

36 responses



This teacher helps us to realise that this subject is continuously evolving and growing to make sense of the world.





The data collected on this particular teacher shows that there issues of concern regarding this teacher's practice. The data is made anonymous for the purpose of collaborative discussion with other teachers. The information serves as a sample for analysis and it enables the opportunity for professional conversations to take place so that the colleague can improve their practice.

Below is another example of the feedback from students regarding teacher Y.



This teacher adjusts the lesson if we experience difficulties in learning. ²⁴ responses





This teacher enables us to develop confidence and self-esteem in this subject.

24 responses



This teacher uses assessment results to provide extra help/extension to appropriate students.

24 responses



This teacher creates a positive atmosphere in class in which we feel part of a team of learners.





This teacher provides time for us to reflect and talk about the concepts that we are learning.

24 responses



Pedagogy in this subject

This teacher encourages us to test ideas/take risks and discover new ideas in this subject.





This teacher develops our ability to think and reason in this subject.

24 responses



This teacher encourages us to try different techniques to solve problems/complete tasks.

24 responses



This teacher encourages us to place a high value on this subject.





This teacher tells us what the purpose of each lesson is.

24 responses



This teacher knows and caters for the problems that we commonly encounter in learning new topics.

24 responses



This teacher helps us construct an understanding of the language and processes of this subject.





Student engagement with the curriculum

This teacher challenges students to think through and solve problems/complete tasks, either by themselves or together as a group. 24 responses



This teacher makes the subject interesting for me.





This teacher makes learning this subject satisfying and stimulating.

24 responses



This teacher makes this subject come alive in the classroom.

24 responses



This teacher shows us interesting and useful ways of solving problems/completing tasks.





Relationship between subject and the real world.

This teacher helps the class to understand how this subject relates to the real world.

24 responses



This teacher helps us to make the links between the different topics of this subject and other aspects of our lives.





This teacher prepares us for adult life by helping us to see how important this subject will be to our careers and to everyday life.

24 responses



This teacher teaches us about the way in which this subject contributes to changes in society, and the way in which society has changed this subject.

24 responses



This teacher helps us to realise that this subject is continuously evolving and growing to make sense of the world.





While the results for teacher Y a more positive than the results for teacher X, there are still areas where improvement is required. In-school variability continues to be a matter of concern. More importantly, the collaborative analysis of the information gathered helped the research team and the school leadership to plan ahead in response to the lessons learned from the administration of these surveys. The collaborative work done in engaging with this information provided significant scope for professional reflection and growth.

The research team thought it necessary to conduct an evaluation of the project and for that purpose the **Evaluation of Assessment For Learning Implementation - Questionnaire** has been developed.

The questionnaire asked teachers to reflect on the impact that having taken part in the focused professional learning over the last year and a half has had on their teaching practice and on student learning.

A copy of the evaluation instrument can be found in the appendixes section of this report.

The instructions of the questionnaire were as follows:

Dear teacher

Over the last couple of years, All Saints Grammar has been engaged in a journey of teacher professional learning as part of the school's improvement agenda. At the core of the professional learning sessions that have been scheduled throughout the year has been the focus on developing teacher expertise on the school's pedagogical framework, Assessment for Learning (AfL).

In the interest of evaluating the effectiveness of the process that has taken place up to this point, and the way it has influenced teacher practice, we would like to ask for your impressions of the progress made in achieving the key aims of this project.

As a result of your engagement in the ongoing professional development in your school, particularly in the area of using the principles and implementing the practices of assessment



for learning kindly reflect on the changes that you have observed in your teaching practices and on student learning.

Please rate your agreement on the following items based on the scale below:

- 5 very great extent
- 4 great extent
- 3 moderate extent
- 2 some extent
- 1 small extent
- 0 not at all

This questionnaire was administered in November of 2017. Below is a summary of the responses given by teachers.

Evaluation of Assessment For Learning Implementation – Questionnaire





2. Writing clear and explicit learning intentions

40 responses



3. Sharing learning intentions

40 responses



4. Writing clear and explicit success criteria





5. Sharing success criteria

40 responses



6. Ensuring students' understanding of learning intentions

40 responses



7. Ensuring students' understanding of success criteria





8. Using activities that are responsive to the learning needs and characteristics of students

40 responses



9. Engaging students in self-assessment

40 responses



10. Engaging students in peer assessment





10. Engaging students in peer assessment

40 responses



11. Providing timely and effective feedback

40 responses



12. Supporting students to use feedback to further improve their learning





13. Designing assessment tasks that fulfil a formative purpose

40 responses



14. Developing assessment tasks aligned to learning intentions

40 responses



15. Analysing and interpreting data from assessment tasks to inform next stage of instruction





16. Modifying teaching programs and practice in response to students' performance

40 responses



17. Developing teacher self-efficacy





Improvement in student learning

1. Improves student engagement

40 responses



2. Enhances student motivation





3. Increases student achievement/performance

40 responses



4. Increases equity for all students as they are able to access effective teaching





5. Increases equity for all students as they are able to access effectively designed assessment tasks

40 responses



6. Increases student self-concept




7. Increases student self-regulation

40 responses



8. Increases student self-esteem

40 responses





9. Increases student self-efficacy

40 responses



10. Increases students' metacognitive skills

40 responses





11. Increases students' deep learning skills

40 responses



12. Increases students' ability to transfer skills and knowledge 40 responses



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Discussion

As argued by Ronfeldt, Farmer, McQueen, & Grissom, (2015),

"Teacher collaboration, when practiced with a focus on instructional strategies, curriculum, and assessment particularly, has benefits for both teachers and students. Results are even more promising when the collaboration is extensive and perceived by teachers as helpful. Collaboration among teachers even influences the results of teachers who do not experience directly the same high-quality collaboration. Researchers conclude, student achievement gains are greater in schools with stronger collaborative environments and in classrooms of teachers who are stronger collaborators" (p. 512)

Building professional capital through focused professional learning and collaborative work has been the focus of this research project. The evidence collected at the beginning of this learning journey suggested quite clearly that teachers at All Saints Grammar could identify the need for a process of professional development and collaborative practice. Teachers' initial evaluations of the school operation and school culture identified clear needs for better leadership for improvement. Michael Fullan (2015) states that "collaborative cultures' when focused and developed with quality have the most powerful effect on student learning". Moreover, according to Hattie (2016), Rachel Jean Eells' (2011) meta-analysis demonstrated that collective teacher efficacy and student achievement were strongly related with an effect size of 1.57. The factors influencing collective efficacy continue to be researched but it is widely accepted that school leadership that is responsive to the professional needs of teachers and who provide a clear vision and direction for their schools are more likely to develop a high efficacy team. Building the capacity of its teachers is the core purpose of this research project. The school leadership is responsive to teachers' feedback on the school operation.

Using the National School Improvement Tool to evaluate the school's operation, teachers at All Saints Grammar gave a **Low** rating to the school's effectiveness on the domain of An Explicit Improvement Agenda.

The descriptor for the Low rate in the NSIT states,



- There is no obvious plan for improving on current achievement levels. School leaders appear to be more focused on day-to-day operational matters than on analysing and understanding school data, setting targets for whole-school improvement or communicating an improvement agenda to the school community.
- Minimal attention is paid to data and there is very limited communication of school results or of intentions for improvement to parents, families and the wider school community.
- Expectations for significant school improvement are low and staff tend to 'explain' current achievement levels in terms of students' socioeconomic backgrounds and/or geographical location. There is little evidence that the staff of the school have a shared commitment to improving outcomes for every student, and this appears to be contributing to a culture of underperformance. There is little evidence that the school is looking to external sources to identify evidence-based strategies for improvement. (p.3)

In response to this teacher evaluation, the school embarked in a process of strategic planning for improvement at the heart of which would be a deliberate professional development intervention program.

The data collected with the initial Teacher's Assessment For Learning Competency Framework survey showed that teachers at ASG felt that there was a need to revisit the school's understanding about assessment, the place of assessment in the process of learning, and the design of assessment tasks to assess students' progress in learning. The second iteration of the same teacher survey showed significant improvement on teachers' perception of their competence in designing appropriate assessment tasks to fulfil a formative purpose. Such improvement may be in part at least due to the concerted professional discussions all teachers engaged in during throughout the duration of the project.

The research team put in place a series of professional learning sessions aimed at reviewing assessment concepts and designing strategies to assess students' learning within an Assessment For Learning framework. After a period of discussing the research literature on assessment teachers were asked to work collaboratively discussing and designing assessment instruments that met the criteria of a formative task. The evaluation template for the collaborative activity is shown below.





Evaluating an Assessment Instrument to Fulfil Formative Purpose

| Description of the task: | | |
|--|---|--|
| Formative Requirement | What evidence is there that your assessment instrument is doing this? | How can you improve your assessment instrument to better fulfil this formative requirement? |
| 1. Variety of approaches to elicit evidence of learning on the skills and knowledge students must demonstrate attainment. | | |
| 2. Provide opportunities for interpretation of the data gathered through this instrument, including during the completion of the task. | | |
| 3. Plan and implement an action plan that progresses students' learning further, including during the completion of the task. | | |

In addition, teachers engaged in a process of collaborative design of assessment instruments that fulfil a formative purpose. Five formative questions, based on Wiliams' five formative strategies schema, guided the process of assessment design. The template below guided the discussion on assessment design.



I



Assessment Processes for Formative Purposes

Assessment task details: ____

| AfL Strategy | Evaluative question | Design: Tasks/strategies | Due Dates |
|--|--|---|-----------|
| Clarifying, sharing, and understanding learning intentions | What is the learning you are assessing? (Skills, knowledge) | Context of the task: Outcomes Assessed: | |
| | | Knowledge & Skills: Students will be assessed on how well they demonstrate, | |
| Engineering effective discussions, tasks, and activities that elicit evidence of learning | • How do the assessment components (tasks) provide opportunities to elicit learning from all students? | Tasks to be completed: | |
| Providing feedback that moves learners forward | • How does the assessment design allow opportunities for students to receive feedback from peers and their teacher, and for the teacher to adjust their teaching? | Formative Interaction: | |
| Activating students as resources for one another | • How does the assessment design allow opportunities for students to collaborate in the process of completing the assessment? | Formative Interaction: | |
| Activating students as owners of their own learning | • How does the assessment design allow opportunities for independent work and metacognitive awareness? | Formative Interaction: | |



The practical implementation of the various Assessment For Learning strategies were being implemented to a significant extent across all subject areas. The Student Survey on Teacher Implementation of Assessment For Learning Practices indicated that most students could see evidence of AfL strategies in their teachers' practice.

The research team then introduced Open to Learning Conversations (OtLCs) as another mechanism to offer teachers feedback on their implementation of AfL practices in their lessons. The purpose for the OtLCs process was to establish feedback opportunities for all teachers about their AfL classroom implementation. Most teachers appreciated the opportunity to give and receive feedback to and from colleagues and found the process beneficial. Self-evaluation through video recording their own lessons was followed by peer lesson observation. In addition, Heads of Department were scheduled to observe lessons for teachers in their team. The template below guided the process of OtLCs.

Open to Learning Conversations

Rationale:

The importance of high quality teaching has been clearly identified as a significant factor in affecting student performance. At the heart of our preoccupation is the desire to improve the quality of the learning opportunities we offer students at All Saints Grammar.

Moreover, giving and receiving feedback has been proven to be a key factor in bringing about improvement.

In order to achieve improvement based on receiving and giving feedback the school will foster professional dialogue through Open to Learning Conversations (QtLC). These QtLCs will be based on colleagues observing each other's lessons and offering feedback to one another.

The aim is that in time the team will develop a culture where all staff accept classroom observations as the norm.

The process suggested in this document is intended to encourage professional dialogue aimed at affirming teacher practice, highlighting areas of strengths, identifying areas for improvement and suggesting an action plan if required. The project is intended to foster collaboration in a non-threatening manner, with the ultimate aim of improving the quality of teaching and learning that takes place in our classrooms.

The process:

- The colleagues will organize a time to observe each other's lessons. (Release will be organized for the colleagues on an agreed day)
- The observation will be based on the focus areas outlined in the document below. These focus areas need to be discussed by the team and understood as essential aspects of Formative practices that are expected to take place in the classrooms.
- The colleagues will then have a conversation with the colleague intended as a reflection on the observation. The focus of the reflection should be the points addressed in the rationale above.
- The colleague is then asked to reflect on the benefits of the experience.
- The documentation of the process is then submitted to the Head of Secondary or Deputy Head of Primary once observations are conducted by the Head of the Department.

The essential questions this process attempts to answer is:

How effective are the colleague's practices on the focus areas? What is the impact that the teacher's practices are having on the students during the lesson?

The space provided for strengths and weaknesses should provide clear evidence in answer to these essential questions

All members of the teaching staff will take part in this process.



Lesson observation - feedback to colleague

Procedure:

- Agree with the colleague on a date for lesson observation
- Agree on the expectations for all the focus areas for the observation (see below)
- Agree on a Open to Learning Conversation (OtLC) to offer feedback to the colleague

| Observer's name | Colleague's name | Year Group | Subject/Course |
|---|---|--------------------------|---------------------|
| | Plan | - AA | <i>a</i> |
| | Foc | us Area | 1 |
| | 1 Lesson structure | and teaching strategies | |
| How effective was Were there a range | ve a clear opening – develo as the lesson structure? ge a of strategies used? es balanced based on the r re the strategies? | ommo | |
| rengths - The colleag | ue did this well by: | Possible areas for impro | ovement/Strategies: |
| | | AΩ | |
| | | KAD | |



2.- Effective communication with students

Instructions:

- Were the learning intentions clearly presented?
- Were all instructions for activities clearly stated?
- Did checking for understanding happen effectively?

Questioning:

- Was questioning used as pre-testing, to assess students' levels of understanding, to offer feedback?
- Did the questions asked support students' learning?
- Did the questions encourage higher order thinking?
- Was there a variety of questioning techniques used?

Engagement:

- Were explanations interactive and student-centered?
- Was there a willingness to listen to students, including effective use of waiting time?
- Was there engagement in classroom discussion?
- Were all students engaged?

| Strengths - The colleague did this well by: | Possible areas for improvement/Strategies: |
|---|--|
| | |
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3,_≂ The learning environment

- Was there evidence of a positive learning environment?
- Were classroom activities managed smoothly and efficiently?
- Were responses in managing student behavior practical and consistent?
- Was there constant awareness of what was happening in the classroom?
- Were proactive measures taken to maintain a safe learning environment?
- Was an effort made to built rapport with every student?





Observer's Reflection:

 Write any additional feedback not covered by the comments above

 Suggested Action Plan for the colleague:

Colleague's Reflection:

Comment on the usefulness of having had an Open to Learning Conversation (Observation and feedback):

Steps to be taken in response to suggested action plan:



The process of Open to Learning Conversations in the context of building professional capital can best be described in Hargreaves and Fullan's (2012) words.

"The core principles that draw on and build professional capital in schools are ... about developing your commitments and capabilities, pushing and pulling your peers, exercising collective responsibility together and collaborating with your competitors across the whole [school] and for the great good that transcends us all" (p. 146).

It was evident throughout this process of collaborative engagement in explicit professional learning that teachers embraced these opportunities for personal and collective growth. In response to teachers' and students' feedback throughout this project our professional learning sessions were explicitly aimed at addressing areas of concern or areas were further learning was needed.

The Evaluation of Assessment For Learning Implementation – Questionnaire provided valuable information about the perception of teachers in regards to their own learning in engaging with the School's chosen pedagogical framework. It is pleasing to see that the great majority of teachers responding to the questionnaire expressed that significant value was added to the quality of their teaching practice as a result of engaging in the professional learning program implemented by the school. On developing Learning Intentions and Success Criteria for example, more than 90% of teachers reported improvements in their practice; more than 95% of teachers reported improvements in their ability to support students through the use of immediate feedback on their progress. More than 90% of teachers reported significant improvements on students' engagement in the learning provided in the classroom. Overall, the questionnaire made it clearly evident that teachers felt that their own teaching practice as well as student engagement, motivation and learning progress have improved as a result of the professional learning on implementing Assessment For Learning principles and practices at our school.

It is worth noticing that the Evaluation Questionnaire asked teachers to make suggestions about future professional learning programs. The list of suggestions offered by teachers makes it very



clear that they are interest in further developing the depth and breadth of learning in the various areas of Assessment For Learning implementation.

Implications

The work done in this research project at All Saints Grammar has not only made significant gains in the process of building the professional capital of teachers, and shown the impact that collaborative practices can have on the improvement of school culture. In addition to that already worthwhile aim, the project has taken the conversation about Assessment For Learning to a level of implementation that is inclusive of all forms of assessment practices. This project at All Saints Grammar has attempted to get rid of the dichotomy between formative and summative assessments. This project has demonstrated that in fact all forms of assessment can be formative in nature, design, and purpose. Not only is this a recent contention in educational research but also it is in fact a pioneering act of rethinking assessment that will improve students' learning outcomes. As such, this is an area that merits continuous attention in educational research.

Limitations of the Study

It is important to acknowledge the difficulty in measuring the long term achievements of this project with a degree of accuracy. While it is possible to gain an impression of growth in understanding of the principles and strategies of an Assessment For Learning pedagogical approach, it is much more difficult to ascertain the extent of success in the effective implementation of such pedagogical approach at this early stage. Expert implementation may take still another few years to develop across the school. A longitudinal study may provide better opportunities to measure the full impact of the work this project has helped to get started.

The broad scope of the project can be considered both an advantage as well as a hindrance. Given the overlapping and at times competing agendas involved in the effective implementation of this project may have prevented the school from achieving greater gains in the development of the AfL framework across the school. A more focused and narrow area of investigation may have been



preferable but this in turn may have prevented the research team from addressing all the areas of the school's needs identified in the process.

Conclusion

This project has been a multilayered study aimed at developing expertise on the area of Assessment For Learning. In the process of working towards achieving this aim though, the project has allowed for the growth of the school into a professional learning environment where teachers are challenged, encouraged and supported to engage in collaborative practice that can bring about significant gains in students' academic and social outcomes.

Our descriptive approach to data collection, through surveys and through qualitative data in the OtLCs gave the research team and the school leadership a good picture of the progress that has been made throughout the period of the research project. The school's emphasis on building the professional capital of its teachers through the implementation of Assessment For Learning principles and strategies has provided significant impetus to the development of a culture of professional learning and professional discussions focused on improving practice that will benefit the students.

While the development of expertise on the effective implementation of the Assessment For Learning framework is still a work in progress, there is strong evidence to argue that focussing the school's direction, creative collaborative cultures, and deepening learning about Assessment For Learning, is helping create a culture of continuous improvement where teacher accountability is borne out an inner drive for excellence.



Research to Practice Impact

Participation in this research project has given teachers at our school significant exposure to a refreshed view of our profession as educators. The involvement and engagement with concerted professional learning has renewed and re-energised our teachers' professional practice. The opportunity to involve teachers in conducting research, developing and administering surveys and questionnaires, leading professional discussions, etc. has provided growth and empowerment of teachers. As a result, the project has inevitably shaped our school's operation into the future.



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All Saints Grammar's Leadership Team extends its gratitude to the ASG Research Project Team for their tireless management and drive of the project's various stages.

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We would like to acknowledge and thank all teachers and students of All Saints Grammar for their willing engagement and participation in the various processes and stages of this research project.

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Bibliography

- Assessment Reform Group. (2002). Assessment for learning: 10 principles. In A. R. Group (Ed.): Nuffield Foundation.
- Black, P. J., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles Policy and Practice, 5(1), 7-73.
- Black, P. (2006) 'Assessment for learning: where is it now? Where is it going?' in C. Rust (ed) Improving Student Learning through assessment, Oxford Centre for Staff and Learning Development, (2006)
- Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003). *Assessment for learning: Putting it into practice*. Oxford, United Kingdom: Oxford University Press.
- Black, P., McCormick, R., James, M., & Pedder, D. (2006). Learning how to learn and assessment for learning: a theoretical inquiry. *Research Papers in Education*, *21*(2), 119 132.
- Black, P. J., & Wiliam, D. (2009). Developing the theory of formative assessment. Educational Assessment, Evaluation and Accountability, 21(1), 5-31.
- Bloom, B. S. (1969). Some theoretical issues relating to educational evaluation. In R. W. Tyler (Ed.), Educational evaluation: new roles, new means: the 63rd yearbook of the National Society for the Study of Education (part II) (Vol. 69(2), pp. 26-50). Chicago, IL: University of Chicago Press.
- Carless, D., Joughin, G & Mok, M (2006) Learning-oriented assessment : principles and practice Assessment and Evaluation in HE, 31(4), pp. 395-398
- Davison, C. (2007). Views from the chalkface: English language school based assessment in Hong Kong. *Language Assessment Quarterly*, 4(1),37-68.
- Davison, C. (2008). *Assessment for learning: Building inquiry-oriented assessment communities*. Paper presented at the 42nd Annual TESOL Convention and Exhibit, New York, NY.
- Davison, C. (2013). Innovation in assessment: Common misconceptions and problems. In K. Hyland & L. Wong (Eds.), *Innovation and change in English language education* (pp. 263-275). Oxon: Routledge.



- Friedman, H., & MacDonald, D. (2006). Humanistic testing and assessment. *Journal of Humanistic Psychology*, *46*(4), 510-529.
- Fletcher, Dan. Standardised Testing Brief History. United States: Time Magazine, 2009.
- Fullan, M. & Quinn, J., (2016). *Coherence: The Right Drivers in Action for Schools, Districts, and Systems:* Sage Publications Inc., Corwin Press Inc.
- Gibbs G. & Simpson C., Learning and Teaching in Higher Education, Issue 1, 2004-05 Conditions Under Which Assessment Supports Students' Learning.
- Gipps, C. V., & Stobart, G. (1997). Assessment: a teacher's guide to the issues (3 ed.).
 London, UK: Hodder and Stoughton.
- Hargreaves, A. & Fullan, M. (2012). *Professional Capital: Transforming Teaching in Every School*: Taylor & Francis Ltd, Routledge.
- Hattie, J. (2008). *Visible learning: a synthesis of over 800 meta-analyses relating to achievement*: Routledge, Hoboken.
- Hattie, J. (2012). *Visible Learning for Teachers: Maximizing Impact on Learning:* Routhedge, Hoboken
- Jonassen, D. H. (Ed). (2001). *Handbook of Research for Educational Communications and Technology*. Lawrence Earlbaum, Bloomington IN.
- Kennedy, K. J., Sang, J. C. K., Wai-ming, F. Y., & Fok, P. K. (2006). Assessment for productive learning: Forms of assessment and their potential for enhancing learning. Paper presented at the 32nd Annual Conference of the International Association for Educational Assessment, Singapore.
- Masters, Geoff N., "National school improvement tool" (2012). http://research.acer.edu.au/tll_misc/18
- Ronfeldt, M., Farmer, S., McQueen, K., & Grissom, J. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, 52(3), 475-514.
- Sadler, D.R. (1989) 'Formative assessment and the design of instructional systems', Instructional Science 18: 119-44



- Scriven, M. (1967). The methodology of evaluation. In R. W. Tyler, R. M. Gagné & M. Scriven (Eds.), Perspectives of curriculum evaluation (Vol. 1, pp. 39-83). Chicago, IL: Rand McNally
- Stiggins, R. J. (2002). Assessment crisis: The absence of assessment for learning. *Kappan Professional Journal*, 1-10.
- Wiliam, D. (2009). An integrative summary of the research literature and implications for a new theory of formative assessment. In H. L. Andrade & G. J. Cizek (Eds.), Handbook of formative assessment. New York, NY: Taylor & Francis.
- Wiliam, D. (2011) Embedded formative assessment. Bloomington, USA: Solution Tree.

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Appendices

- 1.- School Culture Triage Survey
- 2.- Teacher's Assessment For Learning Competency Framework Teacher as Assessor
- 3.- Teacher's Assessment For Learning Competency Framework Teacher as Motivator
- 4.- The Student Evaluation of Accomplished Teaching Scale
- 5.- Evaluation of Assessment For Learning Implementation Questionnaire

School Culture Triage Survey

Professional Collaboration

1. Teachers and staff discuss instructional strategies and curriculum issues.

Tick all that apply.

1. Never

2. Rarely

3. Sometimes

4. Often

- 5. Always or Almost Always
- 2. Teachers and staff work together to develop the school schedule.

Tick all that apply.

| 1 | 1. | Never |
|---|----|-------|
|---|----|-------|

| 2. | Rarely | |
|----|--------|--|
|----|--------|--|

3. Sometimes

- 4. Often
- 5. Always or Almost Always
- 3. Teachers and staff are involved in the decision-making process with regard to materials and resources.

Tick all that apply.

1. Never

2. Rarely

- 3. Sometimes
- 4. Often
- 5. Always or Almost Always

4. The student behaviour code is a result of collaboration and consensus among staff.

Tick all that apply.

2. Rarely

3. Sometimes

4. Often

5. Always or Almost Always

5. The planning and organisational time allotted to teachers and staff is used to plan as collective units/teams rather than as separate individuals.

Tick all that apply.

| 1. Never |
|----------------------------|
| 2. Rarely |
| 3. Sometimes |
| 4. Often |
| 5. Always or Almost Always |
| |

Affiliative Collegiality

6. Teachers and staff tell stories of celebrations that support the school's values.

Tick all that apply.

2. Rarely

4. Often

- 5. Always or Almost Always
- 7. Teachers and staff visit/talk/meet outside of the school to enjoy each others' company. *Tick all that apply.*
 - 1. Never
 - 2. Rarely
 - 3. Sometimes
 - 4. Often
 - 5. Always or Almost Always
- 8. Our school reflects a true 'sense' of community.

Tick all that apply.

- 1. Never
- 2. Rarely
- 3. Sometimes
- 4. Often
- 5. Always or Almost Always
- 9. Our school schedule reflects frequent communication opportunities for teachers and staff.

Tick all that apply.

1. Never

2. Rarely

3. Sometimes

- 4. Often
- 5. Always or Almost Always

10. Our school supports and appreciates the sharing of new ideas by members of our school. *Tick all that apply.*

| ICK | all | that | appi | y. |
|-----|-----|------|------|----|
| | | | | |

| 1. Never |
|----------------------------|
| 2. Rarely |
| 3. Sometimes |
| 4. Often |
| 5. Always or Almost Always |

11. There is rich and robust tradition of rituals and celebrations including holidays, special events and recognition of goal attainment.

Tick all that apply.

Never
 Rarely
 Sometimes
 Often
 Always or Almost Always

Self-Determination/Efficacy

12. When something is not working in our school, the faculty and staff predict and prevent rather than react and repair.

Tick all that apply.

- 1. Never
- 2. Rarely
- 3. Sometimes
- 4. Often
- 5. Always or Almost Always

13. School members are interdependent and value each other.

Tick all that apply.

- 1. Never
- 2. Rarely
- 3. Sometimes
- 4. Often
- 5. Always or Almost Always

14. Members of our school community seek alternatives to problems/issues rather than repeating what we have always done.

Tick all that apply.

| 1. Never |
|----------------------------|
| 2. Rarely |
| 3. Sometimes |
| 4. Often |
| 5. Always or Almost Always |
| |

15. Members of our school community seek to define the problem/issue rather than blame others. *Tick all that apply.*

1. Never
 2. Rarely
 3. Sometimes
 4. Often

- 5. Always or Almost Always
- 16. The school staff is empowered to make instructional decisions rather than waiting for supervisors to tell them what to do.

Tick all that apply.

| 1. Never |
|--------------|
| 2. Rarely |
| 3. Sometimes |
| 4. Often |
| |

5. Always or Almost Always

17. People work here because they enjoy and choose to be here.

Tick all that apply.

| 1. Never |
|----------------------------|
| 2. Rarely |
| 3. Sometimes |
| 4. Often |
| 5. Always or Almost Always |



1. Teacher's Assessment for Learning Competency Framework

Teacher as an ASSESSOR – this domain covers the skills of a teacher to develop a wide range of assessment tasks and to use a comprehensive system of assessing student learning. Teacher needs to evaluate the appropriateness, usefulness, adequacy, trustworthiness and fairness of his/her assessment practices.

Performance Levels - Descriptions of Teacher's Classroom Performance

A: Performs basic tasks required in implementation. Application is limited and generally mechanistic. Implementation 'rules' are followed in a step-by-step way without with limited consideration of the context in which optimal teaching and learning occurs. AfL is seen as a somewhat limited and inflexible set of skills applicable in all situations.

B: Demonstrates acceptable performance characterised by personal development of an AfL implementation routine based on recurring situations. In new or novel learning situations, some critical implementation elements are typically omitted.

C: Deliberately plans AfL implementation. The implementation is more effective and organised as a result of clear strategies and mechanisms. New situations and contingencies in the learning process are managed effectively. Teacher is using a wide range of AfL activities.

D: Implements AfL in a holistic way. All components of AfL are incorporated in a coherent way across the whole process of students' learning that makes sense to both students and parents/carers. Important decisions through assessment and evaluation of the different issues in learning and teaching are made to help develop better strategies and approaches in learning, teaching and assessment.

E: Easily adjusts the implementation of AfL in various situations with implementation relying on his/her perception of each learning and teaching situation. At this level, the teacher is also providing expert AfL leadership, advice and support to colleagues.

Development of Assessment Tasks

1. Develops appropriate assessment strategies

Tick all that apply.

A. Develops assessment strategies but limited to measuring student learning.

B. Develops assessment strategies to measure learning outcomes and to support learning and student achievement

C. Develops a range of assessment strategies which put assessment as central to classroom practices with active engagement of students

D. Evaluates the suitability of the assessment strategies

E. Provides engaging professional assistance to colleagues in developing suitable assessment tasks

2. Designs assessment tasks

Tick all that apply.

| 1 | Α. | Desians | aeneric | assessment | tasks |
|---|----|---------|---------|------------|-------|
|---|----|---------|---------|------------|-------|

| В. | Desians | inclusive | assessment | tasks |
|----|---------|-----------|---|-------|
| υ. | Designs | 110103100 | 000000000000000000000000000000000000000 | lasks |

C. Designs differentiated and multi-dimensional assessment tasks that allow students to demonstrate their learning in a variety of ways

D. Evaluates the suitability of the differentiated assessment tasks developed

E. Provides training to colleagues in designing differentiated assessment tasks

Measurement of Students

3. Uses a range of assessment methods

Tick all that apply.

| 1 | Α. | Uses | limited | assessment | methods |
|---|----|------|---------|------------|---------|
|---|----|------|---------|------------|---------|

B. Uses informal and formal diagnostic, formative and summative assessment methods

C. Uses a wide range of assessment methods suited to students' capabilities, learning needs and interests (informal and formal, diagnostic, formative and summative)

D. Evaluates the appropriateness of assessment methods according to the goals of conducting assessment (informal/formal, formative/ summative)

E. Provides assistance to peers in using a wide range of assessment methods suited to students' capabilities, needs and interests (informal/formal, formative/ summative)

4. Gathers a range of evidence of students' learning

Tick all that apply.

A. Gathers limited evidence to determine the extent to which students have achieved outcomes

B. Gathers evidence of students' learning to determine how they are progressing on to what extent they have achieved the learning outcomes

C. Gathers evidence of students' learning across four dimensions and analyses data to show a coherent picture of overall students' learning progress and achievement

D. Assesses the usefulness of evidence of students' learning progress and achievement

E. Demonstrates to colleagues expert ways of gathering a range of evidence of students' learning progress and achievement

5. Uses rubrics to assess students' learning

Tick all that apply.

- A. Uses valued expertise in assessing student learning
- B. Uses rubrics to assess student learning
- C. Uses rubrics and valued expertise to identify student learning opportunities
- D. Reviews the effectiveness of rubrics against valued expertise in assessing students' performance and identifying learning opportunities
 - E. Provides expert assistance to colleagues in effectively using rubrics

6. Records evidence of student's learning progress and performance

Tick all that apply.

B. Organises evidence of students' learning to show the improvement of students across time

C. Uses several strategies in recording students' learning to effectively show learning progress and achievement

D. Evaluates the effectiveness of the recording strategies in showing learning progress and achievement

E. Provides expert assistance to colleagues in recording students' learning

Ensuring Trustworthiness of Assessment

7. Considers factors that affect students' performance (length of assessment, suitability of task, language, design, readiness of students)

Tick all that apply.

A. Identifies factors that may affect student performance in the assessment

B. Determines the readiness of students before participating in the assessment

C. Develops and uses a checklist to ensure all factors affecting students' readiness to participate in the assessment are minimised or removed

D. Uses information gathered regarding students' readiness to modify assessment tasks accordingly

E. Provides professional guidance to other teachers in modifying assessment tasks based on information gathered on students' readiness

8. Avoids interference in task completion (e.g. ability to read, write, personality, physical condition or knowledge of irrelevant background information)

Tick all that apply.

A. Identifies any problems that might hinder students' ability to demonstrate their learning

B. Uses assessment tasks which do not require irrelevant background knowledge and skills or special talents or abilities to demonstrate learning

C. Employs several checking mechanisms to identify possible factors, which might hinder students' performance

D. Evaluates the overall assessment and teaching practices to avoid factors which might hinder students' performance and quickly adjusts the assessment tasks where necessary

E. Provides training for teachers on how to avoid factors which might interfere with students' performance

9. Establishes dialogue/ conversation with colleagues to ensure consistent, fair and comparable judgment of students' learning(engages in standardisation)

Tick all that apply.

A. Contributes to discussions about ensuring consistent, fair and comparable judgment of students' learning

B. Initiates discussions to ensure consistent, fair and comparable judgment of students' learning

C. Questions assessment results to confirm the interpretation of students learning to ensure consistent, fair and comparable judgment

D. Synthesises the results of discussion/ moderation to reach a consensus to ensure consistent, fair and comparable judgment of students' learning

E. Leads the moderation activity to reach a consensus in decision-making to ensure consistent, fair and comparable judgment

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4. Teacher's Assessment for Learning Competency Framework

Teacher as a MOTIVATOR – this domain requires the teacher to use assessment tasks and assessment information to enhance students' motivation. The aim of the teacher is to provide differentiated instruction and assessment to address individual students' learning needs and motivation.

Performance Levels - Descriptions of Teacher's Classroom Performance

A: Performs basic tasks required in implementation. Application is limited and generally mechanistic. Implementation 'rules' are followed in a step-by-step way without with limited consideration of the context in which optimal teaching and learning occurs. AfL is seen as a somewhat limited and inflexible set of skills applicable in all situations.

B: Demonstrates acceptable performance characterised by personal development of an AfL implementation routine based on recurring situations. In new or novel learning situations, some critical implementation elements are typically omitted.

C: Deliberately plans AfL implementation. The implementation is more effective and organised as a result of clear strategies and mechanisms. New situations and contingencies in the learning process are managed effectively. Teacher is using a wide range of AfL activities.

D: Implements AfL in a holistic way. All components of AfL are incorporated in a coherent way across the whole process of students' learning that makes sense to both students and parents/carers. Important decisions through assessment and evaluation of the different issues in learning and teaching are made to help develop better strategies and approaches in learning, teaching and assessment.

E: Easily adjusts the implementation of AfL in various situations with implementation relying on his/her perception of each learning and teaching situation. At this level, the teacher is also providing expert AfL leadership, advice and support to colleagues.

1. Email address *

ADAPTATION OF TEACHING

2. Uses a variety of teaching and learning methodologies

Tick all that apply.

| A. Uses an | v teaching | and | learning | methods |
|------------|------------|-----|----------|---------|
| | | | | |

- B. Uses culturally relevant and interesting teaching and learning methods
- C. Develops or innovates a range of relevant and interesting teaching and learning methods
- D. Assesses the effectiveness of teaching methods developed and used

E. Provides support to colleagues on how to develop, innovate and use a range of relevant and interesting teaching and learning methods

3. Uses flexible teaching processes

Tick all that apply.

| A. Delive | ers the l | lesson | with | STRICT | adherence | to | the | plan |
|-----------|-----------|--------|------|--------|-----------|----|-----|------|
|-----------|-----------|--------|------|--------|-----------|----|-----|------|

B. Analyses assessment results and uses it to adjust teaching methods

C. Uses assessment results and other sources of information to adjust teaching methods

D. Outlines information on the effectiveness of the different sources of information and the key elements in adjusting teaching

E. Leads colleagues in using assessment and other assessment information to adjust teaching

DEVELOPMENT OF ENVIRONMENT THAT VALUES INDIVIDUAL LEARNERS

4. Conducts assessment with consideration of student background and culture.

Tick all that apply.

| | A. Demonstra | es recognition | of students' | worth |
|--|--------------|----------------|--------------|-------|
|--|--------------|----------------|--------------|-------|

- B. Treats students in ways that reflect their worth
- C. Responds appropriately to students' differences
- D. Demonstrates high level of respect to students by modelling and reinforcing respect between teacher and students and amongst students as well.

E. Demonstrates to colleagues various ways to develop a learning culture where every student is respected

5. Develops an environment of trust

Tick all that apply.

- A. Builds mutual trust and good rapport with students
- B. Identifies and addresses factors that inhibit students' trust
- C. Provides activities that promote trust between and amongst students and teachers

D. Evaluates the effectiveness of activities that promote trust amongst teachers and students and improves those activities

E. Shares with colleagues effective ways to develop an environment of trust

6. Ensures openness in the class

Tick all that apply.

A. Provides opportunities for students to present their views but still maintains high level of authoritativeness

B. Initiates ways to develop classroom openness

C. Creates an environment where students are confident in sharing their views, ideas and thoughts and in seeking helpEvaluates classroom activities and identifies those that enhance appropriate openness in the class

D. Evaluates classroom activities and identifies those that enhance appropriate openness in the class

E. Demonstrates to colleagues ways to ensure openness in the class

7. Uses assessment to build students' interest to learn

Tick all that apply.

| Α. | Identifies | signs o | of students' | becoming | disinterested | in their | learning |
|----|------------|---------|--------------|----------|---------------|----------|----------|
| | | | | | | | |

- B. Uses assessment to build up students' interest in learning
- C. Employs several assessment activities to sustain students' interest in learning
- D. Evaluates the effectiveness of assessment activities that build up students' interest in learning
- E. Demonstrates to colleagues best practices in building students' interest to learning

8. Demonstrates belief in the ability of every student to improve

Tick all that apply.

- A. Advises low performing students to undertake remedial instruction
- B. Works regularly with low performing and with learning needs students to improve their learning
- C. Uses several strategies to help individual students improve their learning

D. Identifies the best approaches for helping individual and different groups of students improve their learning

E. Models to colleagues positive attitudes that demonstrate the belief that all students improve

DIRECTING STUDENTS TOWARDS GOAL ATTAINMENT

9. Affirms students' good performance

Tick all that apply.

- A. Identifies students' good performance and gives praise
- B. Identifies students' good performance and uses praise directed at effort, self-regulation, engagement and learning
- C. Uses praise directed at effort, self-regulation, engagement and learning and other strategies to affirm students' performance
 - D. Selects and uses the most appropriate strategies to affirm students' learning
 - E. Demonstrates to colleagues various ways to affirm students' good performance

10. Clarifies students misconceptions

Tick all that apply.

- A. Identifies students' misconceptions about the lesson
- B. Follows through students' progress in correcting their misconceptions about the lesson
- C. Uses a wide range of strategies to address students' misconceptions about the lesson

D. Assesses the effectiveness of various strategies in addressing students' misconceptions about the lesson

E. Helps colleagues to use various strategies in addressing students' misconceptions about the lesson

11. Reinforces positive learning attitude of students

Tick all that apply.

| | A. Identifies students' positive learning attitudes |
|-----|---|
| | B. Provides activities which enhance students' positive learning attitude |
| | C. Employs several strategies for reinforcing students' positive attitude to improve learning |
| pos | D. Provides information related to the effectiveness of various strategies for reinforcing students' sitive attitudes |
| | E. Models to colleagues various ways for reinforcing positive learning attitudes |
| | |
| | |

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FINAL Version The Student Evaluation of Accomplished Teaching Scale

*Required

- 1. Please Insert Teacher Name Below: *
- 2. Please Insert Your Class Below: *

Commitment to students and their learning

Please indicate the EXTENT of your agreement/disagreement by selecting 1 to 5, where 1 = Strongly Disagree and 5 = Strongly Agree

3. This teacher is committed to the learning of all the students in the class. *

Mark only one oval.

- 1 2 3 4 5
- 4. This teacher adjusts the lesson if we experience difficulties in learning. *

Mark only one oval.



5. This teacher enables us to develop confidence and self-esteem in this subject. *

Mark only one oval.



- 6. This teacher uses assessment results to provide extra help/extension to appropriate students. * *Mark only one oval.*
 - 1
 2
 3
 4
 5
- 7. This teacher creates a positive atmosphere in class in which we feel part of a team of learners. * *Mark only one oval.*
 - 1
 2
 3
 4
 5
- 8. This teacher provides time for us to reflect and talk about the concepts that we are learning. * *Mark only one oval.*
 - 1 2 3 4 5

Skip to question 9.

Pedagogy in this subject

Please indicate the EXTENT of your agreement/disagreement by selecting 1 to 5, where 1 = Strongly Disagree and 5 = Strongly Agree

9. This teacher encourages us to test ideas/take risks and discover new ideas in this subject. *

Mark only one oval.

10. This teacher develops our ability to think and reason in this subject. *

Mark only one oval.

| \bigcirc | 1 |
|------------|---|
| \bigcirc | 2 |
| \bigcirc | 3 |
| \bigcirc | 4 |
| \bigcirc | 5 |

11. This teacher encourages us to try different techniques to solve problems/complete tasks. * Mark only one oval.



12. This teacher encourages us to place a high value on this subject. *

Mark only one oval.



13. This teacher tells us what the purpose of each lesson is. *

Mark only one oval.



14. This teacher knows and caters for the problems that we commonly encounter in learning new topics. *

Mark only one oval.


15. This teacher helps us construct an understanding of the language and processes of this subject. *

Mark only one oval.



Student engagement with the curriculum

Please indicate the EXTENT of your agreement/disagreement by selecting 1 to 5, where 1 = Strongly Disagree and 5 = Strongly Agree

16. This teacher challenges students to think through and solve problems/complete tasks, either by themselves or together as a group. *

Mark only one oval.



17. This teacher makes the subject interesting for me. *

Mark only one oval.



18. This teacher makes learning this subject satisfying and stimulating. *



19. This teacher makes this subject come alive in the classroom. *

Mark only one oval.

| \bigcirc | 1 |
|------------|---|
| \bigcirc | 2 |
| \bigcirc | 3 |
| \bigcirc | 4 |
| \bigcirc | 5 |
| | |

- 20. This teacher shows us interesting and useful ways of solving problems/completing tasks. * *Mark only one oval.*
 - 1
 2
 3
 4
 5

Relationship between subject and the real world.

Please indicate the EXTENT of your agreement/disagreement by selecting 1 to 5, where 1 = Strongly Disagree and 5 = Strongly Agree

21. This teacher helps the class to understand how this subject relates to the real world. *

Mark only one oval.



22. This teacher helps us to make the links between the different topics of this subject and other aspects of our lives. *



23. This teacher prepares us for adult life by helping us to see how important this subject will be to our careers and to everyday life. *

Mark only one oval.

24. This teacher teaches us about the way in which this subject contributes to changes in society, and the way in which society has changed this subject. *

Mark only one oval.



25. This teacher helps us to realise that this subject is continuously evolving and growing to make sense of the world. *





Evaluation of Assessment for Learning Implementation Questionnaire

Over the last couple of years, All Saints Grammar has been engaged in a journey of teacher professional learning as part of the school's improvement agenda. At the core of the professional learning sessions that have been scheduled throughout the year has been the focus on developing teacher expertise on the school's pedagogical framework, Assessment for Learning (AfL).

In the interest of evaluating the effectiveness of the process that has taken place up to this point, and the way it has influenced teacher practice, we would like to ask for your impressions of the progress made in achieving the key terms of this product.

As a result of your engagement in the ongoing professional development in your school, particularly in the area of using the principles and implementing the practices of assessment for learning kindly reflect on the changes that you have observed in your teaching practices and on student learning.

Rate your agreement on the following items based on the scale below:

Key: 0 = Not at all 1 = Small extent 2 = Some extent 3 = Moderate extent 4 = Great extent 5 = Very great extent

*Required

Please provide us with the following information:

1. Gender *

Tick all that apply.

| Male |
|--------|
| Female |

2. Subject Area *

Tick all that apply.

| English |
|------------------------------|
| Maths |
| Science |
| Creative and Performing Arts |
| History/Geography |
| Primary |
| Secondary |

Others

3. Age *

Tick all that apply.

30

| Less than |
|-----------|
| 31-40 |
| 41-50 |
| over 51 |
| |

4. Education Attainment *

Tick all that apply.

Bachelor Degree

Masters Degree

PhD

Other

Improvement in teacher practice

Rate your agreement on the following items based on the scale below:

Key:

- 0 = Not at all
- 1 = Small extent
- 2 = Some extent
- 3 = Moderate extent
- 4 = Great extent
- 5 = Very great extent

As a result of your engagement in professional learning, to what extent do you agree that it has brought improvement in your practice, particularly on:

5. 1. Lesson Planning *

Mark only one oval.



6. 2. Writing clear and explicit learning intentions *



7. 3. Sharing learning intentions *

Mark only one oval.

| \bigcirc | 0 |
|------------|---|
| \bigcirc | 1 |
| \bigcirc | 2 |
| \bigcirc | 3 |
| \bigcirc | 4 |
| \bigcirc | 5 |
| | |

8. 4. Writing clear and explicit success criteria *

Mark only one oval.



9. 5. Sharing success criteria *

Mark only one oval.



10. 6. Ensuring students' understanding of learning intentions *

- 0 1 2 3
- 5

11. 7. Ensuring students' understanding of success criteria *

Mark only one oval.

| \bigcirc | 0 |
|------------|---|
| \bigcirc | 1 |
| \bigcirc | 2 |
| \bigcirc | 3 |
| \bigcirc | 4 |
| \bigcirc | 5 |
| | |

12. 8. Using activities that are responsive to the learning needs and characteristics of students * *Mark only one oval.*



13. 9. Engaging students in self-assessment *

Mark only one oval.



14. 10. Engaging students in peer assessment *

- 0
- 2
- 3
 - _____4
 - 5

15. 11. Providing timely and effective feedback *

Mark only one oval.

16. **12.** Supporting students to use feedback to further improve their learning * *Mark only one oval.*

17. **13. Designing assessment tasks that fulfil a formative purpose** * *Mark only one oval.*



18. 14. Developing assessment tasks aligned to learning intentions *

- 19. **15.** Analysing and interpreting data from assessment tasks to inform next stage of instruction * *Mark only one oval.*
 - 0 1 2 3 4 5
- 20. **16.** Modifying teaching programs and practice in response to students' performance * *Mark only one oval.*
 - 0 1 2 3 4 5

21. 17. Developing teacher self-efficacy *

Mark only one oval.



Improvement in student learning

Rate your agreement on the following items based on the scale below:

Key:

- 0 = Not at all
- 1 = Small extent
- 2 = Some extent
- 3 = Moderate extent
- 4 = Great extent
- 5 = Very great extent

As a result of your engagement in professional learning, to what extent do you agree that the revised learning and teaching activities brought improvement on student learning, particularly, it:

22. 1. Improves student engagement *

Mark only one oval.

| \bigcirc | 0 |
|------------|---|
| \bigcirc | 1 |
| \bigcirc | 2 |
| \bigcirc | 3 |
| \bigcirc | 4 |
| \bigcirc | 5 |

23. 2. Enhances student motivation *

Mark only one oval.



24. 3. Increases student achievement/performance *

Mark only one oval.



25. **4. Increases equity for all students as they are able to access effective teaching *** *Mark only one oval.*

26. 5. Increases equity for all students as they are able to access effectively designed assessment tasks *

Mark only one oval.



27. 6. Increases student self-concept *

Mark only one oval.



28. 7. Increases student self-regulation *

Mark only one oval.



29. 8. Increases student self-esteem *



- 3
-) 4
-) 5

30. 9. Increases student self-efficacy *

Mark only one oval.

| 0 | \bigcirc | (|
|---|------------|---|
| 1 | \bigcirc | (|
| 2 | \bigcirc | (|
| 3 | \bigcirc | (|
| 4 | \bigcirc | (|
| 5 | \bigcirc | (|
| | | |

31. 10. Increases students' metacognitive skills *

Mark only one oval.



32. **11. Increases students' deep learning skills *** *Mark only one oval.*



33. 12. Increases students' ability to transfer skills and knowledge $\ensuremath{^*}$

Mark only one oval.



What other assessment knowledge and skills would you want to include in our professional development?

Enumerate as many as you think are needed:

34. **1.**

35. **2.**

36. **3.**

37. **4.**

38. **5.**

