The project is about teacher learning measured by improved student learning outcomes. It is a three year research study that examines why differentiated instruction and assessment can have such an impact on student learning. It has a number of components. These include a professional development course for teachers, a short course for school leadership teams, an online testing and reporting system (ARCOTS) and a series of questionnaires for teachers that address issues of Professional Learning Team (PLT) functioning and procedures, teacher knowledge and understanding of differentiated instruction, and teacher understanding of pedagogical strategies. The professional development component of the research study, which itself is based on research findings, is designed to ensure PLT members have:

- A solid understanding of the theoretical base;
- Experience in the practices and processes that characterise the program (including developmental learning, PLT operations and ARCOTS testing); and
- An understanding of factors that both support and inhibit PLT sustainability.

The data collection component of the research study investigates how teachers’ collaborative use of data to plan teaching interventions within a developmental framework effects student achievement in reading comprehension, numeracy and problem solving. This study is seeking to determine whether the results, already suggested in the Catholic Education Office (CEO) reading comprehension based Learning and Assessment Program (LAP) can be extended across numeracy and problem solving, and generalised. That is the simplified version of the study. In fact, it involves layers.

Working within a developmental framework and implementing evidence-based teaching means that teachers have to be researchers of their own professional practice to have maximum impact on student learning. This can best be achieved collaboratively, hence the use of PLTs, where evidence should be challenged, teacher theories of practice engaged, and teaching interventions planned and evaluated. This research and the teachers’ engagement in PLTs, is at the heart of the project’s approach to improving student learning outcomes. It is therefore the practices and processes themselves, and their application, which have to be understood if meaningful conclusions are to be drawn. For this reason we need the help of schools. We ask you to encourage teachers to register for the research project and to complete the questionnaires which provide us with data that enable us to improve both the program and in turn the teaching practices on student learning outcomes.
Individual teachers, PLTs and schools cannot, by themselves, provide sufficient data for a generalisation about the effectiveness (or ineffectiveness) of the ALP approach to be made. Data from a large number of teachers, PLTs, and schools, in terms of how they operate and their effect on student learning outcomes, over time, is required. This is the focus of ALP research.

Participation in ALP necessarily includes teacher and school participation in the research. The implications of participation are spelled out in the following, generic plain language statement of aims, commitments, confidentiality guarantees and feedback.

**ALP Plain Language Statement**

**School Registration for ALP Research**

The Influence of Evidence-Based Decisions by Collaborative Teacher Teams on Student Reading comprehension, Numeracy and Problem Solving Achievement [in school sector]

Plain Language Statement

We invite your school to participate in a research project, which is being conducted under the leadership of Professor Patrick Griffin and Associate Professor Esther Care of the Melbourne Graduate School of Education at the University of Melbourne. The research is a joint project of the University of Melbourne and the Department of Education and Early Childhood Development.

**What are the aims of the study?**

This study investigates how teachers’ collaborative use of data to plan teaching interventions within a developmental framework affects student achievement in reading comprehension, numeracy and problem solving. Relationships between a range of teacher, professional learning team (PLT), school and student variables on student achievement in the areas of reading comprehension, numeracy and problem solving are addressed in this research.

**What will your school be asked to do?**

Your permission is sought to allow the researchers to:

- Collect data about your school’s leadership, resourcing and support of professional learning teams (PLTs) from you or another member of your school’s leadership team
- Access DEECD data regarding the demographics of your school and its students
- Use de-identified student achievement and background data (eg: class, year level) collected by the school
- Approach teachers from your school who are members of PLTs inviting them to participate in phases of the research as outlined below
- Link student, teacher, PLT and school data from your school via de-identified codes to examine the influence of evidence-based decisions by collaborative teacher teams on student outcomes in reading comprehension, numeracy and problem solving
Data will be collected between February 2012 and December 2014. No student, teacher, PLT or school will be identified as part of this research.

All teachers who are part of PLTs within your school will be invited to complete online questionnaires relevant to their role within the PLT at intervals across the research project. No questionnaire will take more than 15 minutes to complete and in total, no more than 2 hours will be required staggered across a year. These data will be linked to school data and student assessment data across the duration of the research.

Selected teachers or PLTs may be invited to take part in additional aspects of the research.

This involvement may include:
- Online submission of PLT logs to the research team (up to 1 hour per year)
- Interviews conducted at your school (approximately 1 hour)
- Observations of PLT meetings (up to 3 hours)
- Observations of classroom teaching (up to 6 hours)
- Participation in a focus group held at a central location (approximately 2 hours)
- Completion of additional online questionnaires (up to 1 hour)

It is not expected that any one teacher would be invited to participate in all of the above. Your decision regarding your school’s participation in the research will not in any way affect your employment opportunities or those of teachers at your school, or the educational experiences of your students. Your participation and the participation of your teachers will only be used to help improve teachers’ ability to use student assessment data and to work collaboratively in teams to improve learning outcomes for all students.

How will confidentiality be protected?
Participation in this study is completely voluntary, and anonymity and confidentiality of student assessment data, team logs of teaching decisions, observations, interviews, focus groups and questionnaire responses will be ensured to the fullest possible extent. Confidentiality of all data will be preserved through a protocol in which names are replaced by codes. Those subsequently handling the data will do so using only codes. Schools and participants will not be named in any report arising from this research. The information we obtain will be included in reports of the study at a summary level only. Should you wish to withdraw yourself or your school from the study at any time, or to withdraw unprocessed information that has been collected, you are free to do so. All information will be treated in the strictest confidence subject to any legal limitations. It will be stored in secure files at the University of Melbourne under the University’s guidelines for the management of research data and records, and destroyed five years after publication of findings.

How will you receive feedback?
On completion of the research, a summary of findings will be made available to you. It is expected that the results will be presented at workshops for teachers and academic conferences.

This project has the clearance of The University of Melbourne’s Human Research Ethics Committee (HREC project number: 1136675.1). Should you have any concerns about the
conducted of the research, contact the Executive Officer, Human Research Ethics, the
University of Melbourne, on 8344 2073 (phone) or 9347 6739 (fax).

If you have any further questions about the project, please do not hesitate to contact the
chief investigators of the study: Professor Patrick Griffin and Associate Professor Esther
Care.

Program and commitments

Participation in ALP professional development and ALP research, therefore, requires a
three-year commitment from the school. This means that PLT members must also register
as individuals. In summary, participants become part of the research reflecting on and
sharing their own practice as a member of a collaborative team, and tracing their own and
their PLT's development over time. This is supported by the completion of a series of
research instruments (questionnaires) over the duration of the program to establish first, a
baseline measure, and then to identify subsequent changes in terms of:

1. Professional Learning and Team Functioning
2. Metacognition
3. Teacher Beliefs, Knowledge & Practice
4. Pedagogy

This will allow the findings to be contrasted with improvements in student learning
outcomes identified through ARCOTS testing, and for understandings and relationships to
be generalised and published.

The ALP research commitment for PLTs and/or individual PLT members is therefore:

Year 1: Undertake ALP PD course to establish processes and practices
       Complete ARCOTS testing
       Complete the four baseline (initial) research instruments
       Complete the follow-up research instruments (there is usually 6 month
       interval between each baseline and follow-up instrument)

Year 2: Complete ARCOTS testing
       Complete follow-up research instruments
       Upload PLT logs as requested

Year 3: Complete ARCOTS testing
       Complete follow-up research instruments
       Online submission of PLT logs as requested

In addition to the above, interviews, observations of PLT meetings, classroom observations,
and participation in a focus group, may also be included. The maximum research
commitment over the three years would be 14 hours.
Research Instruments

A brief description of each of the research questionnaires to be completed during the programme follows:

1. **Professional Learning Team Functioning**

   The PLT functioning questionnaires explore the actions of the PLT and the ways in which the members work to enhance student learning.

   The first questionnaire explores the ways in which the PLT facilitates the learning of both students and team members. It requires PLT members to reflect on the ways in which the team uses evidence, devises teaching programs, reviews the effectiveness of classroom strategies, resources and assessment approaches, deals with difficult issues and develops the effectiveness of teacher practice.

   The second questionnaire examines the ways teachers engage in the work of the PLT. It requires members to reflect on the ways the members of the PLT participate in discussions, carry out PLT work and ensure the sustainability of the PLT.

   Together, these questionnaires measure the extent to which the PLT provides professional development for teachers which enhances student learning, and the extent to which team members are engaged in this professional learning.

2. **Metacognition**

   Teacher capacity to think about their own practice and learning, to examine their own level of comprehension about their teaching situation, and the challenges that this creates for their own learning, and its connection to their professional development, is a key requirement for the sustainability of teacher professional learning. This instrument aims to collect information in relation to teacher developing awareness about the complexities of differentiated teaching practice and about themselves as learners, considering also their capacity to plan and regulate their own professional learning.

   PLT reflection focuses on their own analysis of evidence of student learning in the context of developmental progressions to identify and target teaching strategies to move students to the next developmental level. Therefore, the ALP project provides both cognitive and collaborative support for teachers to develop metacognitive skills of monitoring and regulating their own understanding and learning.

   In this context, this study aims to explore the extent to which the variation from a deficit to a developmental approach to learning and teaching improves teacher metacognitive awareness about their professional practice and about themselves as learners.

3. **Teacher Beliefs, Knowledge and Practice**

   The teacher knowledge questionnaire measures knowledge in relation to a developmental model of learning and, within it, the knowledge associated with the interpretation and use
of evidence, targeted assessment and instruction, and differentiated practice that scaffolds the learning of all students. These are the key knowledge areas in the ALP professional development program in which the teachers are participating.

The questionnaire on teaching practice explores the way evidence is gathered and interpreted, how it is linked to instruction, and how it is used to scaffold and intervene in students’ learning. Teacher engagement at whole class, smaller group and individual levels are also examined in relation to how the content, lessons and tasks are targeted to the learning of every student taking into consideration their learning readiness, profile and interest.

Combined, the responses for these questionnaires allow for the relationships between teacher beliefs, knowledge and practice to be analysed, as well as how these relationships are influenced by teacher involvement in the ALP project. In identifying the effects of the ALP project on teacher beliefs and teaching practice.

Responsibilities

The role of school leaders in maximising the potential outcomes of both the professional development and research elements of ALP are significant, as are the potential benefits. School leadership plays an active and central role in providing goals or targets for student learning; monitoring and collecting evidence on progress; using this information to stimulate teacher reflection; putting in place organizational arrangements to support new professional learning and practices especially time and physical resources; participating with, motivating and encouraging teachers; and celebrating achievement.

School leaders have enormous influence on the success or otherwise of ALP in a school. They can actively support it through the processes outlined above, they can allow the initiative to wither through inattention, or they can kill it outright by assigning it a low priority and denying recognition and necessary support including resources, particularly time.

School leaders considering joining ALP must play an active role in supporting its implementation. This is often in the form of school leaders becoming members of PLTs, though it is not a requirement. What is necessary is that school leaders build an understanding of the theory, the practice and the potential of the program to focus the work of the school on its core business, improved student learning. At the same time, it is essential that school leadership ensure that the necessary support mechanisms are in place.

At a minimum these include:

1. Symbolic leadership of the program by articulating the purpose of the program, its significance for the school, the commitments, and the nature of support, both immediate and ongoing, that it will be given.
2. The appointment of a PLT leader for each PLT, preferably as part of the school’s formal leadership structure, and PLTs of between 4-6 participants.
3. Appointing a Research Contact at the school to coordinate research activity with the ARC.
4. Provision of formal meeting time during school hours (this includes meeting time adjacent to the school day) of at least one hour per fortnight, and allowance for preparation time.
5. Protection of the work of the PLT. This means that the focus of PLT work is on ALP practices and processes, and not taken up with other responsibilities.
6. Facilitating ARCOTS testing.
7. Ensuring resources are available to PLTs to implement evidence-based teaching (this can relate to flexibility with classroom and teacher arrangements as much as flexibility with subject or department budgets to purchase specific resources).
8. Monitoring and encouraging the work of the PLTs.
9. Discussing the work of PLTs and the results in school-wide forums.

Enrolments and further information

Enquiries regarding joining the ALP professional development program and research study, contact:

Professor Patrick Griffin  
Chief Investigator  
Director, Assessment Research Centre  
p.griffin@unimelb.edu.au

For all other enquiries, contact:

Danielle Hutchinson  
ALP Academic Coordinator  
 hud@unimelb.edu.au