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Teacher reform in Indonesia: can offshore programs create lasting pedagogical shift?

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ABSTRACT

Regional and national interest in reforming teaching in Indonesia has seen governments, NGOs and education specialists combine to drive pedagogical changes among school teachers there. Results of these programs have been indifferent at best. This paper reports on teacher reform programs in Provinsi Papua, one of the most marginal societies in Indonesia. The Papuan Provincial Government, AusAID and an Australian University focused on bringing cohorts of secondary teachers and Principals for professional development to Australia. An evaluative, survey inquiry was conducted into the effectiveness of a series of AusAID (now DFAT Australian Aid) Scholarship programs on changing capacities and approaches of teachers and Principals at least eighteen months after their off-shore experience. Findings revealed significant changes in teaching practices, improved quality of teacher-student relationships and improved interactions with colleagues. We argue that our findings demonstrate an appetite for student-centred approaches to teaching and that off-shore programs may have important outcomes that larger scale, in-country programs fail to realise. This has implications for DFAT Australian Aid-funded and similar Scholarship programs.

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Foreign aid; professional development; pedagogies; habitus

Introduction

Teacher reform in the Republic of Indonesia has been an ambitious goal of successive Governments since the introduction of the Teacher and Lecturer Law in 2005. Chang et al. (2014) argue that teacher status has been low compared with other occupations and point to five factors to explain this: “Educational qualifications; Salary or income level; Competence in both subject matter and pedagogy; Perceived motivation to teach. . .; and official certification (..official recognition that a teacher is a ‘professional’)” (Chang et al., 2014, p. 17). The reform process is a problematic issue. There have been many projects conducted within Indonesia (Supriatna, 2005; Thair & Treagust, 2003; Van der Werf, Creemers, De Jong, & Klaver, 2000) supported by a number of agencies such as the World Bank and the Australian Agency for International Development (AusAID: now DFAT Australian Aid as part of the Department of Foreign Affairs and Trade, DFAT). The

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common theme of these projects' outcomes are local teachers showing initial enthusiasm and embrace, before returning to past practices. The field is problematised further by strong arguments (Guthrie, 2011; Schweisfurth, 2011, 2013; Tabulawa, 2013) that pedagogical reforms based on learner-centred approaches are inappropriate in many developing countries. The evidence from the attempted reforms in Indonesia would add weight to the arguments.

This article reports on the long-term outcomes of a teacher development program conceived in the Province of Papua, on the eastern margins of Indonesia, but implemented largely in Australia. A collaborative approach involving four partners sought to develop a number of secondary teachers by providing an off-shore experience in Australia. The four partners were: the Ministry of Education and Youth, Provincial Government of Papua; AusAID; Willi Toisuta and Associates, Indonesian educational consultants; and the University of the Sunshine Coast in south east Queensland, Australia. Research was undertaken to evaluate the longer term impacts of the off-shore programs and whether such programs, which made considerable human and capital investments, achieved the goals of teacher reform and up-skilling. The focus in this research was solely on teachers in the secondary sector, as this was the emphasis of the Papuan government.

The context of secondary schooling in Papua, Indonesia

The Province of Papua comprises the major land mass of the western half of the island of Papua New Guinea: it is one of two Provinces in the Indonesian territory on the island and is one of 33 provinces in the Republic. Papua has experienced a long history of economic and cultural colonisation (Elson, 2008; McDonald, 2014) but since the establishment of limited autonomy in 2003, the Papuan Provincial Government has committed to greater economic and political self-determination through four "planks" of growth, one of which is the development of ambitious educational goals (GRM International, 2009).

Unfortunately, these lofty ambitions are built on tenuous foundations. Schooling in Papua exhibits a "vicious cycle": students demonstrate low levels of school attendance and completion; these are exacerbated by a shortage of teachers, few of whom are qualified (Dinas Pendidikan, unpublished data; Modouw, 2013); and those schools with a full complement of staff experience endemic teacher absenteeism (UNCEN-UNIPA-SMERU-BPS-UNICEF, 2012; Wulandri & Soesman, 2010). "Transmigrasi" teachers from other parts of Indonesia have helped in raising numbers and skill levels, but they face problems of understanding local language and cultures and sometimes, acceptance. There are approximately 250 Indigenous languages throughout Papua, languages largely unknown to other Indigenous groups, and completely unknown to teachers who are not ethnically Papuan. Rural areas have experienced the worst of these problems; many children cannot access schooling, despite the national government providing full fee support, because there are few if any teachers to staff schools (Modouw, 2013).

Problems specific to secondary schools stem from poor quality teaching and low levels of student achievement in elementary years; literacy levels in Papua are 10% below the national average in a country already underperforming in PISA standardised tests (Dinas Pendidikan, unpublished data). Teacher skills are often at low levels, due in

part to limited teacher preparation (Chang et al., 2014; GRM International, 2009; Wulandri & Soesman, 2010). Teachers attending school haphazardly, experiencing low morale, low levels of pay and limited subject knowledge employ unengaging pedagogies and rely on inadequate textbooks: the very factors Chang et al. (2014) identify as the necessity for teacher reform.

Literature

Professional development of teachers in Indonesia, led by extra-national experts and funding agencies, has had a long history (Marsigit, 2007; Postlethwaite, 1978; Postlethwaite & Nasoetion, 1979; Supriatna, 2005; Thair & Treagust, 2003; Van der Werf et al., 2000). However, the results of these projects have been invariably disappointing. In one of the largest studies, Thair and Treagust (2003) reported on the progress and impact of a national, long-term project to develop science and mathematics teachers, “the single largest teacher professional development program in the world” (Thair & Treagust, 2003, p. 202). Despite many short-term achievements, these authors concluded that the main project, and two related ones, did not realise their intended goals, especially in improved pedagogies in science and mathematics classrooms. For this, they offered several reasons: the skills taught were inappropriate for local contexts of limited resources; large class sizes and entrenched school cultures; teachers feeling a sense of powerlessness in their local contexts; the strategies provided failed to address that powerlessness; their schools lacked adequate laboratories, equipment, and technical support; the adverse influence of senior teachers in schools; and a poor relationship between curriculum design and pedagogical requirements, expressed in terms of an overloaded curriculum. Within a short time after their return to routine classroom work, the teachers had resorted to their traditional, ineffective methods of teaching. The other studies reveal similar outcomes: undeniable early enthusiasm but failure to achieve a sustainable impact.

These projects have relied on overseas funding from international agencies committed to education as basis for economic and social development. One of these is the Australian Commonwealth’s Agency for International Development (AusAID: now DFAT *Australian Aid*) whose programs have included the Australia-Indonesia Basic Education Program 2006 – 2009, and the Australia-Indonesia Partnership Strategy 2008 – 2013 (AusAID, 2012). These programs, Cassity (2010) found, were largely directed through sector-wide approaches to school building programs and assistance to various sectors, such as Islamic schooling. Complementary to these broad systemic efforts has been a series of smaller-scale programs, such as the Australian Leadership Award Fellowships (ALAF) Scholarship program, which have allowed selected professionals to develop skills and expertise in Australian locations (AusAID, 2011).

Within development programs, teachers play a complex role. They are in part the beneficiaries of these programs, yet they are also mediators of the success of larger school development programs. Villegas-Reimers (2003) succinctly described the dual role of teachers in being both consumers of educational reform and the reforms’ primary change agents, through the medium of professional development:

One of the key elements in most of these [educational] reforms is the professional development of teachers. Societies are finally acknowledging that teachers are not only one of the 'variables' that need to be changed in order to improve their education systems but they are also the most significant change agents in these reforms. This double role of teachers in educational reforms – being both subjects and objects of change – makes the field of teacher professional development a growing and challenging area... (Villegas-Reimers, 2003, p. 7)

This “dual role” of consuming and leading pedagogical change is more deeply problematized by the arguments that, in developing countries, learner centred pedagogies are inappropriate and unwelcome. Particularly relevant to Indonesian Papuan teachers is the work of Guthrie (2011); from his experience and research in Papua New Guinea he argued that

Teachers' intuitive, culturally-derived assumptions about the nature of knowledge and the ways it ought to be transmitted, and their perceptions of the roles of students and the goals of schooling, influence their teaching styles. Deep-rooted revelatory philosophies about the nature of truth and how it should be revealed often provide the basis for formalistic educational paradigms...notably a didactic approach... (Guthrie, 2011, p. 198)

Guthrie rejected Beeby's (1966) thesis that pedagogies followed a progressive – sequential and evolutionary – pattern towards an idealised form of student-centred teaching and learning. He argues for a “formalist” pedagogy which “involves organised, whole-class processing of fixed syllabuses and text-books, with the main emphasis on memorising basic facts and principles” (Guthrie, 2011, p. 14).

Guthrie's thesis has strong support from two important sources. Tabulawa (2013) also argues passionately for developing pedagogies in their cultural context, in his cases in Botswana and Sub-Saharan Africa. He too critiques the emphasis on student-centred learning. In a ringing criticism of the educational policies of aid agencies in southern Africa, Tabulawa (2013) argued that there was a politically subversive intention behind these agencies' educational agendas on pedagogical reform.

Schweisfurth (2013) has also pointed out the dangers that misguided educational reform agendas can have on societies in developing countries. The focus of her concerns lie in learner centred education (LCE), and from her research of policies around LCE in several countries, she arrives at a number of conclusions, similar to Tabulawa's (2013) and Guthrie's (2011) arguments. Importantly, however, she takes the view that context is not just local but global and that reform agendas around LCE also reflect the aspirations of those societies: “Global discourses” says Schweisfurth, “become *part of* local aspirations” (original emphasis) (2013, p. 131).

The literature reveals that there are a range of concerns and agendas in educational reform processes in developing countries, the role of teachers in those processes and the goals of international agencies. The research to date boded poorly for the Papuan teacher development programs.

Design of the ALAF professional development programs

Since 2008, AusAID sponsored over 120 teachers and 20 Principals from Papua to study in ALAF teacher development programs at the University of the Sunshine Coast in Queensland, Australia. The PD programs for the teachers and Principals were designed

around five pillars. The first involved deep professional reflection and evaluation on their local context, on a weekly basis, and underpinned other activities in which they engaged. The second was gently orienting their pedagogical perspectives to more student-centred approaches. Teachers were introduced to constructivist theories of learning, with an emphasis on social and cultural construction of knowledge (Wertsch, 1985, 2004), significant for their contexts. Teachers developed a framework for teaching and learning, based on a customised reworking of the Productive Pedagogies model (Education Queensland, 2002; Hayes, Mills, Christie, & Lingard, 2006). The framework complements the foundations of constructivist learning but also led into them aligning the criterion-referenced assessments associated with Productive Pedagogies into the Indonesian assessment processes, the Criteria for Minimum Completion (*Kriteria Ketuntasan Minimal* – KKM). The third pillar was developing a framework for lesson planning, using the 5Es approach: “engage, explain, elaborate, extend, evaluate” (Bybee et al., 2006; Chitman-Booker & Kopp, 2013). Using this framework, teachers were encouraged to develop lesson plans designed for greater student involvement and engagement, while still retaining the formalistic authority of the teacher, in respect to their cultural context. Lesson planning, and selecting appropriate activities and resources, were premised on the use of “low-tech”, low-cost resources, easily available to teachers particularly in rural areas. The fourth pillar was a quality school experience, where the Papuan teachers “shadowed” selected Australian teachers in local schools and classes for three weeks. Here Papuan teachers had the opportunity to observe different approaches to professional practice, in particular high quality pedagogies and assessment, collegiality, collaboration and professional learning. The final pillar was the preparation and presentation of a model lesson, based on the principles of lesson study (Saito & Atencio, 2013; Stevenson & Stigler, 1992; Suratno & Iskandar, 2010). Each participant’s lesson was developed collaboratively, often with their Australian mentors as well as Papuan colleagues, but presented individually. The lesson was filmed and also affirmatively appraised by peers and program staff.

Throughout, there was an emphasis on linking new ideas and knowledge to the teachers’ own local contexts, experiences and aspirations. The key was a continually stated mantra, “Adopt, adapt, or reject”, which reiterated the emphasis on the Papuan teachers deciding themselves what learning they valued and how to apply them on return to Papua. Further, after each program, the University maintained online contact with the participants through Facebook. Also, three teachers’ conferences and professional development workshops have been held in Papua, in 2011, 2013 and 2015, and in these, Papuan teachers assumed responsibility for presenting details of their current work since returning to Papua.

Design of the research evaluation

Every AusAID scholarship program requires an evaluation of deliverables and outcomes at its end, but these do not measure the sustainable impact of these professional development programs, or the participants’ leverage on change among others. Therefore, this research was designed to examine to what extent the teachers and principals had changed their practice and to what extent they might be agents of change, 18 months or more after their return to Papua.

The design involved a retrospective, longitudinal study to identify participants' perceptions of their professional roles and activity before, during and after the Scholarship program. Data were collected using a custom-designed questionnaire of 101 items that was sent to all program participants who had been teaching in Papua for at least 18 months since the PD program. Eighteen months was considered a period long enough for participants to have either incorporated or rejected the learnt pedagogical practices. The questionnaire had an introductory section for demographic details, and then three sections related to 'pre-program', "during program" and "post-program" teaching pedagogies and attitudes. These contained a number of 5-point Likert-style items with questions connected across the three sections, to establish any longitudinal patterns. The response options were coded as 1 for "Strongly Disagree" to 5 for "Strongly Agree". All Likert-style items included an N/A option. At the end of each section there were also questions with open-ended responses to provide important qualitative data sets to elaborate on the information provided.

Of the eighty participants who qualified under the selection criteria for the research study (i.e., they had been back teaching in Papuan schools for 18 months), 56 responded in full, giving a 70% response rate. The dataset comprised 29 males and 27 females of whom 37 were classroom teachers, 9 were deputy principals (who still taught in classrooms) and 10 were school principals. This was considered a high level of response.

The quantitative data analysis involved a test-retest comparison using "pre", "during" and "post" data to identify where statistically significant changes may have occurred in the participants' reported teaching behaviours, work relationships and attitudes as a result of their involvement in the PD program. The Sign Test (Siegel & Castellan, 1988) was used as it is the preferred non-parametric test used when a substantial number of tied scores may occur, which is likely when using Likert-style items (Ho, 2006).

Qualitative data were analysed by collecting all responses to the open-ended questions, translating where necessary, and then reading and coding in teams. Codes and themes were entered and stored into NVivo™; subsequent review and re-evaluation of codes and themes continued to the point of satisfaction with the quality and consistency of the analysis.

Results from the quantitative data

The questionnaire was structured to allow for identification of changes in four different areas: teachers' relationships with school leadership; teaching practices; student-teacher relationships; and relationships with teaching colleagues. Four items were included which examined the participants' relationship with their school leadership. The result of the test-retest analysis is shown in [Table 1](#).

These results indicate that the participants reported significant improvements in the perception of their teaching abilities by their school leadership following their involvement in the PD program. The largest change was seen in the participants' belief that their school principal considered them to be more knowledgeable in relation to teaching pedagogy.

Eleven items were included to assess the possible changes in the participants teaching practices as a consequence of involvement in the PD program. [Table 2](#) shows the test-retest results.

Table 1. Test-retest analysis of items relating to school leadership – Sign Test.

Item Number	Item Text	Negative Differences	Positive Differences	Ties	<i>p</i>
35/76.	The principal of my school was/is very supportive of my teaching practices.	5	19	32	.007
36/77.	The principal of my school recognized/s me as knowledgeable in relation to teaching pedagogy.	4	27	25	<.001
38/78.	I was/am considered by the principal of my school to be knowledgeable in relation to the content in my teaching area.	2	15	39	.002
39/75.	The principal of my school was/is very supportive of my attendance at the ... professional development program.	5	8	43	.581

Table 2. Test-retest analysis of items relating to teaching practices – Sign Test.

Item Number	Item Text	Negative Differences	Positive Differences	Ties	<i>p</i>
15/87.	My teaching in Papua often utilized/s a text book.	27	3	25	<.001
16/88.	Students in my classes took/take a lot of notes while listening to my teaching.	18	17	21	1
17/89.	My students asked a lot of questions in class.	3	32	21	<.001
18/90.	My students often led/lead the class in activities.	2	37	17	<.001
22/91.	I rarely set the students independent assignments to complete.	0	45	11	<.001
23/92.	My students often engaged in independent study and activities in my classes.	2	29	25	<.001
24/93.	My classes regularly used ICT resources.	5	30	21	<.001
25/94.	I considered myself knowledgeable in relation to current teaching practices in my teaching areas.	5	32	19	<.001
26/95.	My colleagues regularly asked me for advice in relation to teaching pedagogy.	5	34	17	<.001
27/96.	I had a good knowledge of the methods of assessment which were available in my teaching areas.	1	28	27	<.001
28/97.	I spent a lot of time reflecting on my teaching performance.	4	29	23	<.001

Every item, with the exception of the amount of student note-taking in class, has demonstrated a substantial and statistically significant change. These changes indicate that the participants have made changes from their classroom being teacher-led, to being more student-focused.

Three items were included to examine the nature of the relationships between the participants and the students in their classes. [Table 3](#) shows the test-retest analysis.

Significant increases have been reported in all areas and indicate a substantial improvement in the quality of the student-teacher relationship and also in the students' enjoyment of their classes.

Five items were included to examine the nature of the relationships and interactions that the participants had with their teaching colleagues. [Table 4](#) shows the result of the test-retest analysis.

Table 3. Test-retest analysis of items relating to student-teacher relationships – Sign Test.

Item Number	Item Text	Negative Differences	Positive Differences	Ties	<i>p</i>
19/84.	My students enjoyed attending my classes.	0	25	31	<.001
20/85.	I had effective relationships and communication with my students.	1	20	35	<.001
21/86.	My students felt/feel that they could come to me for assistance when they needed it.	2	20	34	<.001

Table 4. Test-retest analysis of items relating to colleague relationships – Sign Test.

Item Number	Item Text	Negative Differences	Positive Differences	Ties	<i>p</i>
30/79.	My teaching colleagues were supportive of my going to Australia for the professional development program.	9	8	39	1
31/80.	My teaching colleagues thought that I would learn a lot from the professional development program.	7	9	40	.804
32/81.	I discussed what would be involved in the professional development program with my teaching colleagues.	5	17	34	.017
33/82.	I had effective relationships with my teaching colleagues.	2	16	38	.001
34/83.	I had other teachers I could talk to about my teaching problems.	8	13	35	.383

Two items demonstrated a statistically significant change following completion of the PD program. Involvement in the program appears to have improved the quality of the relationships with other teaching colleagues.

Findings from the open-ended questions (qualitative data)

The findings from these data focussed on four areas: the limitations the teachers identified in their own teaching before coming to Australia; their expectations about what they would learn about teaching on the scholarship program; how their perceptions of student learning changed over the program; and, how they view their current pedagogies since returning to Papua.

Limitations teachers identified in their own teaching before coming to Australia

Participants broadly stated that the teaching methods they employed were limited and were not conducive to quality student learning. They described a transmission model of teaching, such as: *"I just focused on the subject matter I taught and the targeted curriculum that I had to cover"*; *"I used to lecture a lot (very teacher-centred)"*; *"...all my students had to follow the way I taught, whether they liked it or not"*. As well as describing some of these limitations, participants offered some explanations for their approach. The first was class size: *"The number of students in my school ranged from 38 to 42 students in each class, so I used to employ lecturing method"*. Another reason was that these methods were traditional or were expected of them: *"Following the teaching techniques that I learned at my former university, usually I started my class with a greeting, giving explanation about the topic being taught, lecturing, monitoring and evaluating"*; *"I still used the traditional way of teaching, the system that was described in the national syllabus"*.

One limitation of their teaching was reflected in their reliance on textbooks as the sole resource in the classroom: *"I used to rely too much on the prepared textbooks to teach English to my students"*; *"I used textbook only, no variations in my teaching"*; and *"I used a lot of direct teaching using textbooks"*. The lack of textbooks reflected a lack of other resources: *"I used a very monotonous style of classical teaching and learning atmosphere, there was no variety of learning models because of inadequacy of facilities"*.

Expectations with regard to what they would learn about teaching

Not surprisingly, participants expected to learn how to develop their teaching repertoires, with strategies for more successful instructional methods. Some of these were stated as follows: *"I would be able to manage my classroom better and have a good understanding of various relevant teaching methods"; "I hope to get new knowledge in teaching using varied methods of teaching that are not boring"*.

While some statements focussed on the teachers' own techniques, others spoke about teaching to improve learning, such as *"I hope I can learn to teach interestingly so that my students will be interested and like to learn my subject"*. A more detailed response picked up these links: *"1. I could get a new experience on how to implement good teaching. 2. I could encourage learners to have more motivation to study mathematics. 3. I could gain more experiences in various teaching models/methods of learning more appropriate for my students in Papua"*. Their responses generally revealed an underlying sense of frustration; they wanted to enhance their students' learning experiences but they just didn't know how.

Comments with regard to changed perceptions of student learning

Many of the participants emphasised student learning as part of their overall approach and the statements that follow reflect the changed approach that they have made. *"(I have) changed my way of teaching from teacher-centred to student-centred approach, so that my students could be more pro-active participants in my class"; "(I now have an) appreciation toward students during the learning process"; and, "...the students' role needed to be maximized, so the learning focus would not be on teacher, but more on the students"*.

The changed focus onto the learner meant that teachers now considered student learning as they devised lessons and activities: *"I create active situations so that students can communicate. I also try to encourage students to use their imagination, so that they become excited and independent during the class"; "In teaching, I try to make my students more active in learning and become more independent"; and "I also use learning resources from different places and sometimes I even use the sources of learning from my students"*.

Their changed approach is further reflected in the following statements: *"I design learning through play approach to optimize students' learning achievement"; "... how to make learning fun"; "Applying a variety of learning methods that give fun experience to students"*. Two other telling comments reflected the journeys of two participants: one spoke about *"democratising learning"* while another stated that she now had an *"appreciation towards students' ability"*.

Comments with regard to their current teaching and pedagogy

In describing their current approaches, one teacher said: *"My teaching styles, classroom management techniques and student assessments have changed"*, while another stated: *"The main thing has been to change my teaching methods and adjust them with the medium of learning that I made"*. One powerful statement summarised one teacher's changed approach: *"I have changed my teaching techniques. Previously I just relied on text*

books and was always monotonous in teaching. I used to explain things, without involving my students. However, after attending the training program ... I learned a lot about how to make my students interested and enjoy learning".

Participants mentioned briefly some of the ways that they were implementing a more varied, student-centred approach. These included: *"I employ group discussion method, question and answer and sometimes I also use games in my teaching"; "I try to motivate students using various models /teaching techniques using role-plays, games"; "I conduct more experiments"; "My students are more active than the teachers with the methods of fun and exciting experiments that I apply". "I teach my subject using media flash player".* While most comments were about teaching, one participant reflected on assessment and the use of formative methods: *"Students' achievements are not measured just based on the results of tests. Evaluation can be done by asking students' feedback, giving continuous assessments, etc."*

However, participants also revealed difficulties in changing their approaches and several reported that they had not changed their practices entirely. Class size was still considered a major obstacle to better pedagogies: *"My main problem was that the number of students in my class was still relatively big"; "Considering the number of students we have, it is still hard to apply the discussion model in our school".* School facilities were also cited: *"There are not enough supporting facilities to apply what I had learned in Australia, so that slowly I might have forgotten what I had learned".*

Three tangential statements on teaching professionalism are worth noting. The first: *"I am trying to implement a culture of punctuality for students and teachers"* demonstrates a response to the endemic problems of teacher, and student, absenteeism. The second statement is on professional growth: *"I show more openness in providing service and in relating with my students";* while the third refers to that important aspect of critical reflection as professional activity: *"I always keep a learning journal after the teaching learning process. I also asked my students to do the same thing".*

Discussion

The discussion begins by reviewing the evidence for sustainable success from the program, and considers explanations for that. In doing so, it considers the value of a scholarship-based program conducted in Australia for developing teachers in Papua. The discussion finally turns to the vexed issue of developing teachers in student-centred pedagogies.

Both the quantitative and the qualitative data provide complementary evidence that the programs have had positive, sustainable outcomes that have met the aims of the ALAF programs. The findings from the quantitative data show significant outcomes across four major areas. These were: enhanced relationships of the teachers with the school leadership; positive changes in teaching practices; the improved quality of teacher-student relationships and student enjoyment of classes; and enhanced professional relationships with colleagues. The qualitative data provided more descriptive evidence of how these changes were shown, particularly in teaching practices, the quality of teacher-student relationships, and students' enjoyment of class.

While these findings make important statements about the successes of the PD program, there are two features that are of deeper significance, which explain the

apparently sustainable aspects of progress. The first is that the improvements in pedagogy that the teachers report are based on changed views of the nature of student learning and teachers responding to that. The second lies in an enhanced conceptualisation of professionalism, in particular in four main areas. These are: feeling more knowledgeable about current teaching practice; colleagues asking them for advice; engaging in reflective practice; and in their enhanced relationships with school leadership.

The importance of these lie in that they exceed the teachers' pre-program expectations of simply improving their classroom performance. Bjork (2004, 2005) has described and explained the nature of teaching and professionalism among teachers in Indonesia. In his insightful ethnographic studies, Bjork noted that teachers had little sense of who their clients were – students and/or parents – and little sense of responsibility or accountability to them: "Very few of the teachers I observed displayed any sense of wanting to make a difference in the academic lives of their pupils" (Bjork, 2005, p. 67). With regard to teacher professionalism, Bjork cited "a de-emphasis on the facets of the teacher's responsibilities related to instruction" (2005, p. 89) and that "Teachers did not include themselves among the factors that determine student success or failure" (2005, p. 107). In describing relations between teachers and principals, he related how "staff meetings were utilized to instruct teachers about how they should carry out their duties" (2005, p. 100), with no respect for teacher professionalism or teacher input into improving practice.

Explaining this evident pedagogical shift is part of the evaluative process; it is also important in the light of Thair and Treagust's (2003) account of consistent failure in the long-term, large-scale projects they explored in Indonesia. Because Papua is on the margins of Indonesian society and mainstream educational activity, any evidence for successful PD demands careful consideration. The explanations offered lie in two levels of theoretical complexity. At one level there is the nature of the delivery of teaching strategies and ideas that the teachers expected when they first came to Australia. The second level of explanation lies in the complex nature of transformation, around issues of praxis, experience and *habitus* (Roth & Tobin, 2002; Salles El Kadri & Roth, 2013). In the second of these, the importance of temporary displacement is a critical factor, providing both explanation for the reported changes and the justification for the study-abroad nature of the AusAID program.

Much professional development of teachers involves simply giving teachers strategies and knowledge to cope in changing classroom contexts. Meirink, Meijer, Verloop, and Bergen (2009) describe this type of teacher PD as "acquisition", which often involves "a 'passive reception of knowledge' and alterations or changes of knowledge and skills" (Meirink et al., 2009, p. 89). However, as Thair and Treagust (2003) have pointed out, in Indonesia, these imparted knowledge and skills are often de-contextualised so they are invariably shed soon after the teachers return to their own classrooms. Therefore, sustained change requires a second dimension of professional learning, conceptualised by Meirink et al. (2009) as "construction" and "participation". Teachers become active constructors of knowledge, and PD learning activities "should not be considered separate from the context in which they take place" (Meirink et al., 2009, p. 89).

Nevertheless, this approach to teacher learning in the Scholarship programs does not satisfactorily explain the sustained change reported in the research. A deeper

explanation lies in the program effecting a sense of transformation, a concept derived from the work of Roth and Tobin (2002, 2005) and Salles El Kadri and Roth (2013). For Salles El Kadri and Roth, a “trajectory of transformation” occurs when “the condition for development is participation in the practice of real, physical relations... (and) change comes in and through participation generally and in and through relations with others” (2013, p. 108). The experiences gained through the instructional part of the program are crystallised in the three weeks of school placement, when, as accepted professionals, they can work “at the elbow” (Roth & Tobin, 2002) of fellow professionals in Australian schools.

Such transformation, effected by personal experience and professional relations, allows the teachers to re-invent themselves within their profession – what Roth and Tobin (2002) call “relearning to teach” (p. 49). Brock (2013) argues this is particularly important when teachers’ initial teacher education has been inadequate, something several of the participants certainly identified. A clue to understanding this transformation lies in the idea of *habitus*, as related to teaching by Roth and Tobin (2002). For Roth and Tobin, *habitus* refers to those dispositions or systems of dispositions for perceiving and interacting with the world:

Habitus, not accessible to our consciousness and therefore without reflection, generates the patterned ways we interact with the world, that is our practices that embody actions, perceptions and expectations... The world is structured by *habitus*. *Habitus* therefore constitutes a system of structured dispositions in which the past is constituted in the present: our dispositions are always historical and biographical products. (Roth & Tobin, 2002, p. 10)

Roth and Tobin explain the powerful conservatism of the force of *habitus* in teaching, arguing that: “(*h*)*abitus* is not static and closed but an open system of disposition that is under continuous experience-dependent transformation” It is “the past being constituted in the present” (2002, p. 11). Unfortunately, that “past constituted in the present” becomes shackles that tie teachers to practices and behaviours they are powerless to change. While Roth and Tobin argue that teachers can alter their *habitus*, to do so requires levels of power and agency that these teachers lack; they are limited by the very experiences of their *habitus*. In the PD programs reported here, one result has been to fracture the teachers’ co-*habitus* of teaching in Papua. They have experienced a different *habitus*, into which they were initiated through instruction in an Australian university and then inducted in Australian schools, such that they were able to transform their *habitus* of teaching and recognise a different approach to teaching and learning.

If this fracture of *habitus* justifies some temporary displacement of the teachers from their local context, it appears to contradict Thair and Treagust (2003) explanation for failure, that the large scale PD developers and practitioners failed to take account of the local context. Our findings suggest that displacement may be necessary to break with the traditions of the past. The displacement appeared to allow the teachers to work at the elbow of teachers operating in a different *habitus* and in so doing, allowed a juncture to make a break with the past and establish a new start to one’s teaching career and consideration of pedagogy.

However, does this all matter? Guthrie (2011) Tabulawa (2013) and Schweisfurth (2011, 2013) argue strongly, in different ways, that student-centred, progressive

paradigms of pedagogy are themselves decontextualized and inappropriate, and a threat to teacher-centred, formalistic practices in “developing” countries’ classrooms. However, Schweisfurth (2013) does acknowledge the global aspirations of local societies, and to ignore these aspirations is equally disrespectful. The programs have never sought to threaten the central role of the teacher in the classroom, but rather to strengthen it. Perhaps the best perspective of our approach lies in Hattie’s (2013) view of teachers as “activators” rather than “facilitators” of learning. In this role the teacher remains the authority in the classroom. In this way, the teachers are moving from a “knowledge model” of teaching to an “intrinsic value model” of teaching (Kerry, 2008). In the former, “teaching rests on the assumption that the task of the teacher is to move the content of a body of information from a syllabus into the head of the student” (Kerry, 2008, p. 78). Intrinsic value models, on the other hand, “accept two complementary approaches to learning by students: that valuable learning is deep learning and that part of the teaching process is to move learners through the low orders of thinking to the higher orders of thinking” (Kerry, 2008, p. 87). There is compelling evidence from the study that some teachers in Papua are now doing this.

Conclusion

The findings from the study provide a warrant for the successes of a program that took teachers away from Papua on a Scholarship program in Australia, and justifies, in large part, AusAID’s funding for such programs. Without that travel, it is argued here, the transformation would not occur and thus the sustained change evidenced in this evaluation would not be seen. The scholarship program is making a real difference to the professional lives of the teachers and, by logical extension, to the lives of their students. The programs are justified further in that not only are the teachers maintaining sustained change themselves but that they are influencing change in their own contexts, thus increasing the returns on the investment by AusAID/Australian Aid.

Second, the study has challenged theses about teachers and students in developing countries consciously avoiding, even rejecting student-centred approaches to learning. This dissonance may be explained by varied understandings of “student-centred learning”: further, the formalistic authority of the teacher (Guthrie, 2011) has not been challenged by the PD programs. The evidence from this study is that the teachers involved anxiously sought to put student learning, and motivation in the foreground of their classrooms.

There are two important limitations to this study; one is that to date we have been unable to conduct observational studies in Papua. Nevertheless, the research design is suitably robust to convince us that the study is valid and reliable; also informal observations and other evidence convince us further of the quality of the study. Second, the costs of the program in terms of the numbers of teachers involved question its appropriateness in terms of the scale of the changes needed in Papuan, and Indonesian society. Nevertheless, the study shows that these programs have provided a model for sustainable professional development: the challenge now is to consider how the model’s features can be reproduced on a larger scale.

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