

Teacher Classroom Behaviour Management Preparation in Undergraduate Primary Education in Australia: A Web-based Investigation

Sue C. O'Neill

Jennifer Stephensen

Macquarie University Special Education Centre, Sydney

Abstract: Classroom behaviour management is an essential skill required by all teacher graduates to facilitate instruction in curriculum content. This article describes the classroom behaviour management (CBM) content on offer in Australian undergraduate primary education programs. To date, no nationwide studies exist that report the CBM instruction on offer in pre-service teacher education programs. Thirty-five primary teacher preparation programs were reviewed. Thirty programs (85.7%) contained mandatory course-work in CBM, 108 units contained relevant content, 33 of those were stand-alone CBM units (30.6%). More units were found with CBM content embedded within methods or inclusion units than stand-alone CBM units. The mean hours of CBM instruction per mandatory stand-alone unit was 31.46 hours, 25.5 for stand-alone electives, and 2.3 hours within embedded units. The content of CBM units is reported as well as the research interests of the unit convenors and instructors. Implications of the major findings are discussed.

Introduction

The ability of a teacher to establish and maintain a productive learning environment through effective classroom management is viewed by experienced teachers, school administrators and the community alike as an essential skill (Stoughton, 2007). For the purpose of this article classroom and behaviour management (CBM) is defined as the decisive, proactive, preventative teacher behaviours that minimise student misbehaviour and promote student engagement, and, strategic, respectful, actions that eliminate or minimise disruption when it arises, to restore the learning environment (Brophy, 1988). The connection between effective teacher behaviours and student achievement is well established in research literature, with classroom management found to be an important variable in student achievement and engagement (Hattie, 2009; Marzano, Marzano, & Pickering, 2003; Wang, Haertel, & Walberg, 1993). It is acknowledged that for productive learning environments to exist, classroom management must be intertwined with effective instruction that is engaging and meaningful (Brophy, 1988; Gore & Parkes, 2007; Kounin, 1970).

Beginning teachers and other stakeholders have expressed dissatisfaction with pre-service CBM preparation (Jones, 2006; Pigge & Marso, 1997). Researchers overseas and in Australia, using survey and interview methods, have reported that beginning and experienced teachers nominate managing student behaviour as a major cause of stress (Geving, 2007; Giallo & Little, 2003) and fear (Kaufman & Moss, 2010), and a reason for leaving the profession (Ingersoll & Smith, 2003; Goddard & Goddard, 2006; Goddard & O'Brien, 2003). When CBM content was

included in their pre-service education, teachers criticised the content as containing too much theory, insufficient information on useful strategies, or insufficient opportunities to practise (Cothran, Kulinna, & Garrahy, 2003; Jones, 2006). Beginning teachers were not alone in their criticism of CBM preparation. Interview research conducted with Victorian school principals revealed that principals viewed the preparation beginning teachers were receiving in classroom management as inadequate (Ingvarson, Beavis, & Kleinhenz, 2004). Some teacher educators themselves believe better classroom management experiences are needed in teacher preparation programs (Scales, 1994).

If classroom behaviour management is an important skill-set that teachers should have, it could be expected that a body of educational research would exist that revealed how teachers are best prepared in this area. Jones (2006) reviewed the literature on what course content would best prepare pre-service teachers in classroom management and reported criticism of the limited amount of coursework, a lack of consensus on what should be in a management course, and faults in preparation in this area. These faults included poorly integrated curriculum in classroom management and the tendency of instructors to present broad material within their own comfort level (Stewart-Wells, 2000). The literature that Jones reviewed included suggestions regarding needs for mastery in key classroom management skills of rules, desists and enlisting parents, research-based skills, identification and remediation of misconceptions in pre-service teachers' understanding of classroom management, multi-cultural competencies, and, skills in behaviour intervention planning. Jones reported advocacy of a range of strategies for delivering this content: apprenticeship models, extended field experiences with carefully chosen and trained mentor teachers, and, reflective problem-solving approaches using case studies including those pre-service teachers experience during placements. Thus, there is much conjecture on what should be taught and how it should be taught, but a lack of evidence as to the effectiveness of these suggestions (Wesley & Vocke, 1992).

Few studies examine how CBM curriculum is included within pre-service teacher preparation programs (Stough, 2006). Atici (2007) suggested that separate (stand-alone) classroom management units were offered in recent Turkish teacher preparation programs, but no specific institutions or courses were discussed. Others have reported on semester-long methods units in classroom management for undergraduate elementary teachers (Sanderson, 2004; Stough, Montague, Landmark, & Williams-Diehm, 2006) and education majors (Clement, 2002) in the US. As part of their investigation into pre-service teacher preparation in classroom discipline, Wesley and Vocke (1992) surveyed 19 tertiary institutions in north-eastern USA that had teacher preparation programs and examined university catalogues. They found that the majority of surveyed programs included instruction in classroom discipline, but few had units focused on this area. Their examination of university catalogues of 111 institutions that offered teacher preparation programs, found just over one quarter of programs contained content related to classroom discipline, fewer than found in their survey. Blum (1994) surveyed 266 teacher preparation programs and found that just over half offered an undergraduate unit in classroom management although the unit was not mandatory for 43% of enrolled students. More recently, Landau (2001) conducted a review of 20 teacher preparation programs utilising information obtained from university websites, and located only one program that included a course titled *Classroom Management*. Stough, Williams-Diehm, and Montague (2004) examined the programs of the top 50 schools of education in the US and found that 22 programs did not contain a course on classroom management. In Australia, Gore and Parkes (2007) found that almost half of all teacher education program structures they examined (for which information was available) contained a discrete management unit.

Some literature describes how CBM content may be embedded within other units. Allen and Blackston (2003) reported on a collaborative problem-solving unit that contained considerable CBM content. Reupert and Woodcock (2010) described how CBM was included in a unit on child development. More commonly, CBM content was reported to be embedded in methods units (Gore, Griffiths, & Ladwig, 2004; Kaufman & Moss, 2010; Lee & Powell, 2005-2006), educational psychology units (Mergler & Tangen 2010, Stoughton, 2007; Tingstrom, 1989), diversity units (Jones & Messenheimer-Young, 1989), and, inclusion/mainstreaming units (Main & Hammond, 2008; Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007). CBM content was also reported as being provided to pre-service teachers in external training and development courses (Siebert, 2005), within seminars before professional experiences (Wagler & Moseley, 2005), during (Clement, 2002), and after student teaching (Kaufman & Moss, 2010; Stoughton, 2007).

The content of CBM coursework is also poorly researched. Blum's (1994) survey of teacher preparation programs in the US indicated a wide range of topics could be included in stand-alone and embedded CBM units, with behaviourist approaches reported to be imparted in over 95% of all units. Content may contain broad approaches such as humanistic models (Clement, 2002; Kaufman & Moss, 2010; Main & Hammond, 2008; Martin, 2004; Van Laarhoven et al., 2007), ecological models (Main & Hammond, 2008), and non-specific classroom management models (Atici, 2007; Higgins & Moule, 2009; Larson & Goebel, 2008; Putman, 2009; Sanderson, 2004). Knowledge about management styles (e.g. laissez faire) may be included (Lee & Powell, 2005-2006). Behaviourist approaches such as applied behaviour analysis (ABA) were noted in some units (Larson & Goebel, 2008; Siebert, 2005; Stough et al., 2006; Van Laarhoven et al., 2007), and the absence of ABA noted in other programs (Main & Hammond, 2008). As well as overviews of models of CBM, specific strategies arising from the effective teacher research (see, for example, Doyle, 1986) have been reported in teacher preparation programs (Kaufman & Moss, 2010). Specific skills such as rule development and reminders, praise, desists and redirections, ignoring, providing choices, and reinforcement of positive behaviours have been reported (Atici, 2007; Higgins & Moule, 2009; Morales, 2001; Sanderson, 2004).

In Australia, although reviews of teacher preparation in literacy and numeracy have been undertaken (e.g. Loudon et al., 2005; White & Elkins, 2000), little has been published that describes the CBM content on offer in teacher preparation programs. Some studies have reported on content in single units which has ranged from content on developing supportive environments as part of the framework of productive pedagogy (Gore et al., 2004) through to broad approaches to CBM (Main & Hammond, 2008) and the integration of CBM content into an undergraduate educational psychology unit (Mergler & Tangen, 2010).

With little to inform us of what is currently occurring in teacher preparation in classroom behaviour management internationally or locally, it is timely to explore what CBM content is being delivered to Australian primary pre-service teachers. This study drew upon information from teacher education programs and units available on the internet to answer the following questions. What percentage of primary preparation programs contained CBM content? Is CBM content mandatory within programs? Is CBM content delivered in stand-alone units or embedded within other units? How many hours of instruction in CBM are included in units and programs? Where in the program structure is CBM content delivered, particularly in relation to professional experience units? What CBM content is being delivered? Lastly, do the unit convenors and instructors of CBM units have research interests or recent publications in CBM?

Method

Australian four-year undergraduate pre-service teacher education programs that were designed to prepare graduates to educate primary-aged students were examined during late 2009 and early 2010. Programs were located by using the search terms *primary teaching courses* in Google and limiting the results to Australian sites. Results were cross-checked against a Google search using the search terms of *Australian tertiary institution*. Each program description located, was then examined to determine whether the program was a four-year undergraduate degree program. Where institutions had more than one program that could prepare their graduates to teach primary aged students (e.g. combined early childhood and primary), such programs were included only if no specific primary program was provided by that institution.

Unit Identification

The identification of units with CBM content involved a two-stage process; the location of units likely to contain CBM content, then an in-depth analysis of identified units. Once programs had been identified, website links were followed to obtain the publically available information on program structure, unit descriptions, course handbooks, unit guides, prescribed textbooks or readings, timetables, calendars, teaching staff profiles, teaching staff publication lists, and professional experience handbooks. In addition, Google searches using the unit code number and institution were carried out to locate additional documents. Google Scholar was used to determine the publication output for unit convenors or instructors who did not list such information on their staff profile pages, or have a staff profile page. When 2009 unit outlines were not located, 2010 information was utilised provided that there was no evidence of change in the unit content. Clear evidence of CBM content delivered by teaching staff was required for unit inclusion rather than outcomes to be achieved whilst on professional experience placement.

During the first stage of CBM unit identification, unit descriptions were read for each unit that formed a part of the prescribed program structure, including education elective units. For new programs that began in 2009, the first year of the new course structure was examined and the second to fourth year structure of the old program. If the following key words or phrases were used in the unit description: *classroom management, behaviour management, functional behavioural assessment, discipline, management of the social environment of the classroom, managing challenging student behaviours, disability types, managing the learning environment, inclusion (of students with special needs), or, inclusive practices*, the unit was included for further analysis. The word *management* alone was not sufficient to include a unit for analysis as it could refer to instructional management rather than classroom or behaviour management. Unit information that referred to *establishing, creating or promoting a positive, supportive or effective learning environment or promoting positive peer relationships through social skills instruction* were coded as including CBM content so long as they also referred to classroom and/or behaviour management *styles, approaches, or strategies* that would reduce behaviour problems within the classroom. Units were excluded if they referred to individually negotiated content, or, were not offered in 2009. Units that mentioned CBM as a component of experiences undertaken during professional experience placements, but did not provide formal teaching of content related to CBM were excluded.

Units where the description contained keywords relating to disability or inclusion were included because it was anticipated that CBM content could be included in such units. Keywords

used for disability categories included: *autism spectrum disorder, attention deficit disorder, intellectual disability, emotional or behavioural difficulties, or mental health diagnoses*. These units, when further reviewed by drawing on additional information, were retained only if contained content on classroom /behaviour management strategies. Units that had readings with clear evidence of classroom behaviour management content or strategies were retained even if unit descriptions did not include classroom behaviour management key words.

Stage two involved an in-depth investigation of each unit. Information was collected from the range of sources described earlier, for each identified unit on: a) the type of teacher education to which program that the unit belonged (i.e., primary degree, combined degree, multi-age, or pathway); b) the nature of the unit as a stand-alone CBM unit or as a unit with embedded CBM content; c) the designation of the unit as a mandatory or elective offering; d) the recommended year for students to complete the unit in the regular non-honours or non-accelerated program; e) total hours of face to face instruction for the unit; f) hours allocated to CBM content where content was embedded; g) prescribed text/s or readings; h) classroom/behaviour management content; i) research interests of unit convenor and instructors; and j) recent publications of unit convenor and instructors.

The definitions developed for the categories used in the coding scheme are described in the following paragraphs. For the type of teacher education program, primary degrees were single degrees that provided a teaching qualification for educating 5-12 year olds, combined degrees were those with a liberal arts component and often lead to the award of an Arts degree in addition to a teaching qualification (degree or diploma), multi-age were degrees that would allow graduates to educate more than one age group such as primary and early childhood or primary and middle school, and, pathway allowed for specialisation in a particular areas (such as middle school) within a larger structure of common education units. Stand-alone CBM units were those aimed exclusively at imparting knowledge, skills and understanding in CBM for typical students enrolled in regular mainstream settings or those deemed to display challenging behaviours who could be included in mainstream settings or in specialised settings. Units containing embedded CBM content were those that contained some knowledge, skills and understanding in CBM, but were not exclusively dedicated to CBM. Units with embedded content were further categorised as teaching methods/pedagogy units (including professional experience units), inclusion units, subject curriculum units, and educational psychology units (including developmental psychology, interpersonal relationships, and abnormal child psychology).

The research interests of each of the unit convenors and instructor(s) who delivered the unit content were examined. Research interest information and recent publications (when listed) were determined from the academic staff profile pages for each institution. Recent publications were limited to books, articles or conference papers published or presented in the past five years. For staff who did not have a staff profile page (such as sessional academics) or permanent academics that did not include their recent publications, Google Scholar searches were made for recent publications, using author and institution name as search terms. CBM key words, as listed above for determining unit content, were used to determine if a publication was relevant to CBM. At least one article, book, book chapter or conference paper had to be located to establish current publication in CBM. Where an institution had multiple campuses across states and the unit was common across campuses, and where no overarching unit convenor could be identified, the research interest and publication category was coded as *unsure*.

Reliability

Inter-rater reliability checks were carried out on one third of primary programs that may have contained units with CBM content. Further checks were carried out on units retained with inclusion, or disability type keywords to ensure all inclusion criteria had been met. Inter-rater reliability checks were also conducted on all the coding categories of one-third of the units retained for in-depth analysis. Kappa coefficients have been calculated and reported for data that was coded into categories, and percentage agreement has been calculated as per Kazdin (1982) for numerical data.

Results

Primary education programs

The initial Google search for four-year undergraduate primary teacher education programs located 35 programs from 35 tertiary institutions across all states and territories. Table 1 shows the number of programs by state/territory and program type. New South Wales (NSW) had the most tertiary institutions offering primary education programs ($n = 9$), with Tasmania and the Australian Capital Territory (ACT) having one each. Fourteen of the institutions had more than one campus in their state, and offered what appeared to be an equivalent program structure (some unit codes were different however). Two institutions had campuses in more than one state that offered equivalent programs. Inter-rater reliability for program location and type was $\kappa = 1$.

State or territory	Primary Degree	Combined Degree	Pathway	Multi-age	Total
NSW	7	2			9
Queensland	5		1	1	7
Victoria	4		3		7
South Australia	2	1			3
Western Australia	3				3
Northern Territory	1		1		2
Tasmania			1		1
ACT	1				1
More than one state	2				2
Totals	25 (71.4)	3 (8.6)	6 (17.1)	1 (2.9)	35

Table 1. Location and type of primary education programs

Note: Percentages in brackets.

The 35 programs contained a total of 1650 units (including education electives) within the standard four-year structures as offered in 2009. During the first stage, 147 units were identified as possibly containing CBM content. Inter-rater reliability for identifying units during stage one from the unit descriptions was $k = .93$, and the inter-rater reliability for assigning units to one of the three categories was $\kappa = .91$ for units with CBM key words, $\kappa = .97$ for inclusion units, and $\kappa = .84$ for disability category units. During the second stage, 39 units were excluded as there was no evidence that CBM styles, approaches or strategies were included in unit content. Thus, 108 units were retained for in-depth analysis. The 108 units represent 6.6% of the 1650 units located from primary programs. The mean number of units with CBM content (stand-alone or embedded) per program was 3.09 ($SD = 2.25$, $Mdn = 2$).

Programs with CBM content

Table 2 shows the category of unit offering within programs and numbers of units offered. Of the 35 programs, 32 (91.4%) had at least one unit that contained some CBM content in stand-alone or embedded, mandatory or elective CBM units. Mandatory CBM content (stand-alone or embedded) was present in 30 of the 35 programs (85.7%). Stand-alone CBM units (mandatory or elective) were offered within 21 (60.0%) of the 35 programs ($M = 0.94$, $SD = 1.03$, $Mdn = 1$). Embedded CBM units (mandatory or elective) were offered within 28 (80.0%) of the 35 programs ($M = 2.68$, $SD = 1.74$, $Mdn = 2$). There were three programs where CBM content appeared limited to one mandatory embedded CBM unit within the four-year structure, and two programs that offered only CBM electives (stand-alone or embedded). One program offered three stand-alone elective units, and three programs offered two stand-alone elective units. Within programs that offered mandatory embedded CBM units, 10 programs offered one unit, and two programs offered as many as six. Embedded CBM electives were offered within fewer programs, with five programs offering a maximum of two units each.

The most common type of unit offered was the mandatory embedded CBM unit (50.9%), with mandatory stand-alone CBM units least commonly offered (14.8%). CBM content was most often embedded in teaching methods units ($n = 36$), followed by inclusion units ($n = 26$), educational psychology units ($n = 8$) and then curriculum units ($n = 5$). Inter-rater reliability for embedded unit categorisation was $\kappa = .92$.

Unit type	<i>n</i> programs	<i>n</i> units offered	<i>n</i> of units per program
Mandatory			
Stand-alone	16 (45.7)	16 (14.8)	1
Embedded	24 (68.6)	55 (50.9)	range 1 - 6
Elective			
Stand-alone	12 (34.3)	17 (15.7)	range 1 - 3
Embedded	13 (37.1)	20 (18.5)	range 1 - 2
Totals			
Mandatory	30 (85.7)	71 (65.7)	
Elective	18 (51.4)	37 (34.3)	
Stand-alone	21 (60.0)	33 (30.6)	
Embedded	28 (80.0)	75 (69.4)	

Table 2. Types and numbers of CBM units offered in programs

Note: Percentages in brackets.

Hours of instruction in CBM and timing of delivery

Information about hours of face-to-face instruction was available for 12 of the 17 (70.6%) electives and 15 of the 16 (93.8%) stand-alone mandatory CBM units. The mean hours of instruction was greater for mandatory stand-alone units (31.46 hours, $SD = 6.25$) than for stand-alone CBM electives (25.5 hours, $SD = 6.60$). The mean hours of instruction for embedded units (mandatory or elective) was 2.2 hours ($SD = 0.84$). Inter-rater reliability for hours of instruction was 87.9%.

Within individual programs, the maximum number of hours of instruction in CBM content provided was 80 hours of face-to-face instruction in addition to instruction in an online

unit. This program offered one mandatory stand-alone CBM unit and three stand-alone CBM electives (all of which could be undertaken over the four-year structure).

Combined degree programs offered the highest average number of mandatory CBM units, with one program offering one mandatory stand-alone CBM unit (37 hours) and six mandatory embedded units. The mean number of hours of instruction in stand-alone mandatory CBM units was highest for combined degrees (37.0 hours, $n = 1$), other program types ranging from 23.7 ($SD = 8.15$) to 33.1 ($SD = 4.38$) hours. Pathway degrees had the highest mean number of hours of face-to-face instruction for stand-alone CBM electives (39 hours, $n = 1$).

The timing of CBM content delivery in programs varied and is presented in Table 3. Stand-alone mandatory CBM units were predominantly in the second or third year of the program. Stand-alone and embedded CBM electives were offered mostly in the third and fourth year. There was a more even distribution of mandatory embedded CBM units across the four years of programs with the highest number of units offered in the second year ($n = 17$), the least in 1st year ($n = 11$). Nine elective units (stand-alone and embedded) were offered in more than one year of the respective programs. Inter-rater reliability for coding the year a unit was offered was $\kappa = .84$.

Unit type	1 st Year	2 nd Year	3 rd Year	4 th Year	Total
Stand-alone CBM mandatory	3	7	6	0	16
Stand-alone CBM elective	0	4	11	12	27
Embedded CBM mandatory	11	17	1	13	55
Embedded CBM elective	1	5	13	10	28
Totals	15	33	44	35	127

Table 3. Year of offering of CBM units

Eight programs (26.6%) provided mandatory coursework before the first professional experience placement. Seven of these units were embedded CBM units. Two programs (6.7%) scheduled the first mandatory CBM unit in the same semester as the first placement, and both were embedded CBM units. Twenty programs (66.7%) scheduled the first mandatory unit after the first professional experience placement, and 12 of the 20 units were stand-alone CBM units.

CBM content in units

Full unit outlines were available for eight units (24.2%) of the 33 stand-alone CBM units. For the 25 remaining units, information ranged from brief paragraph-long unit descriptions to lengthier unit descriptions. Table 4 provides a summary of the CBM content for all units. For stand-alone CBM units with full unit outline information, five of the eight units included theoretical models of management. Evidence-based practices were stated to be included in one of

the eight units. For the remaining stand-alone units where no full outline was available, theoretical models of management were the most common content mentioned ($n = 14$).

For the 75 embedded CBM units, full unit outlines were available for 13 units (17.3%). For more than half these units there was nothing more than a mention of classroom/behaviour management. No reference was made to evidence-based practices, positive behaviour support, or social skills in embedded CBM unit outlines. For the remaining 62 embedded CBM units without full unit outlines, nothing more than the term classroom or behaviour management was given for 38 (61.2%) of the units, with managing challenging behaviours mentioned in 14 units (22.6%). None of the embedded units explicitly mentioned positive behaviour support. Inter-rater reliability for coding of CBM unit content was good to excellent ($\kappa = .84-1$).

Contents	Full unit outline		Unit description /information		kappa co-efficient
	Stand-alone	Em-bedded	Stand-alone	Em-bedded	$\kappa =$
Evidence –based practice mentioned	1	0	1	2	1
Managing challenging behaviours	4	4	11	14	.88
Functional behaviour assessment	3	1	2	2	1
Positive Behaviour Support	3	0	0	0	1
Social Skills	3	0	4	2	1
Theoretical/ psychological models	5	2	14	7	.84
Term classroom/behaviour management mentioned only	0	8	3	38	1
Total units	8	13	25	62	

Table 4. Content of CBM units

Research interests and publications of CBM unit convenors and instructors

Unit convenors and instructors could be identified for 89 (82.4%) of the 108 units. Research interests of 74 (68.5%) unit convenors could be determined. Eleven (14.9%) units had convenors with research interests pertaining to CBM. Two of these convenors were responsible for more than one unit so the number of convenors with CBM research interests was seven. Six instructors were identified, with information on research interests available for four, none of whom had CBM research interests. Inter-rater reliability for coding of unit convenor research interests was $\kappa = .76$ and for unit instructors was $\kappa = 1$.

The publication output for 76 (69.7%) unit convenors and seven additional instructors was located. Recent CBM publications were found for unit convenors of 16 units (21.1%), two were responsible for multiple units, resulting in 13 individual unit convenors having recent CBM publications. No recent CBM publications were located for the unit instructors. Inter-rater reliability for coding CBM publications was $\kappa = .89$ and for unit instructors was $\kappa = 1$.

Discussion

This review located over 100 units with CBM content within 35 primary education programs at 35 tertiary institutions. Units with varying amounts of CBM content represented 6.6% of all units within primary program structures. Three programs contained no CBM content and two programs offered only CBM elective units. Thus, six out of seven primary programs ensured graduates received some mandatory coursework in CBM. This proportion is similar to that found by Wesley and Vocke (1992) who reported that 17 out of 19 teacher education programs surveyed in north-east USA offered classroom discipline content within programs. As this study is the first of its kind in Australia, no conclusions can be drawn as to whether CBM instruction (in stand-alone or embedded units) within *primary* teacher preparation programs has increased or decreased over time.

The predominant method of imparting CBM content in Australian primary preparation programs was by embedding the content particularly within teaching method and inclusion units, with more than two-thirds of all CBM content imparted this way. Close to three-quarters of embedded units were mandatory. Embedding CBM content especially within teaching method units was in keeping with what has been reported elsewhere in the literature (Blum, 1994; Evertson & Weinstein, 2006; Stough, 2006; Wesley & Vocke, 1992).

The findings from this study support previous literature that suggested that when embedded within other units, CBM content may be limited to just a few hours of instruction (Blum, 1994; Stewart-Wells, 2000). There were three programs in this study that included only one embedded mandatory CBM unit within the four-year structure, potentially limiting CBM instruction to a few hours. This limited exposure would allow little more than imparting basic strategies or tricks as Landau (2001) suggested, or perhaps a management model or two; hardly adequate preparation for the management challenges found in many classrooms (Goodlad, 1990). As Blum (1994, p. 241) so aptly stated (there is) "...not much time spent on an issue that may be addressed by teachers, in some way, every single day of their teaching lives."

Stand-alone CBM units were located in more than half of the primary programs examined, but accounted for less than a third of units with CBM content located. Mandatory stand-alone units were present in less than half of the primary programs. This finding is similar to that of Gore and Parkes (2007) for Australian programs and to that of Stough et al. (2004) and Blum (1994) for programs in the US. Other studies (Landau, 2001; Stewart-Wells, 2000; Wesley & Vocke, 1992) have reported fewer stand-alone units, but not all programs in comparison studies were primary programs.

There are a few possible reasons why stand-alone CBM units may not be included in teacher preparation programs. Farkas and Duffett (2010) found that instruction in classroom management was not considered a priority by some education professors in the US with only 37% believing that teacher preparation in maintaining order and discipline in the classroom was essential. Of the 716 professors surveyed by Farkas and Duffett, 50% believed that student disruptions in classrooms were the result of teachers failing to plan engaging lessons. Such attitudes may explain why some program designs focus on effective pedagogy rather than CBM content (Landau, 2001; Stewart-Wells, 2000; Wesley & Vocke, 1992). Effective pedagogy can reduce problematic student behaviour but cannot eliminate it (Emmer & Stough, 2001; Oliver & Reschly, 2007). Other reasons for omitting stand-alone units reported by Wesley and Vocke (1992) included beliefs that CBM content was better learnt as part of field experience, and that embedded CBM content was sufficient. When pre-service teachers were asked to suggest what should be included in teacher preparation programs, 60% indicated they would include a stand-

alone CBM unit (Stewart-Wells, 2000). There is a gap between what pre-service teachers want and what their education professors choose to provide.

It has been suggested that teachers who complete more classroom/ behaviour management coursework during their preparation are better able to manage student behaviour (Alvarez, 2007; Bender & Ikechukwu, 1989). Although there appears to be no research comparing the outcomes of stand-alone and embedded units, some experts believe mandatory stand-alone units are likely to be more effective, and that completion of a stand-alone CBM unit could ease some of the difficulties that pre-service teachers report in managing student behaviour (Landau, 2001; Oliver & Reschly, 2007; Stough et al., 2006). Others claim that explicit and focused coursework in CBM could be beneficial to pre-service teachers instructional ability, confidence, and self-efficacy (Brophy, 1988; Landau, 2001; Martin, 2004; Putman, 2009). When CBM content is delivered by embedding it in other units, it may fail to deliver a comprehensive and integrated curriculum (Evertson & Weinstein, 2006; Jones, 2006; Landau, 2001; Stewart-Wells, 2000).

The lack of stand-alone CBM units in more than half of the primary preparation programs and the limited CBM content in embedded units examined in this study may in part explain why some Australian pre-service and novice teachers feel only moderately prepared in CBM. In 1999, Little found that 44% of Victorian pre-service teachers surveyed reported receiving no formal training in classroom management, although self-report data to establish content delivery in pre-service preparation must be interpreted cautiously, as it relies on memories and perceptions (Stough, 2006). Goodlad (1990) and Stewart-Wells (2000) have suggested that CBM content delivered too far in advance of when it is required can be forgotten. More recently Ingvarson et al. (2004) found that beginning teachers in Victoria ($n = 1123$) rated their pre-service preparation in aspects of classroom management (which included items on encouraging appropriate student behaviour and incorporating effective strategies in classroom management into their teaching), as preparing them to a moderate extent for professional practice. Giallo and Little (2003) reported similar findings for Victorian pre-service teachers regarding their preparedness in behaviour management. The level of preparedness in behaviour management reported by Giallo and Little is, however, higher than that reported by Cains and Brown (1998) for novice teachers in the UK (4.9 compared to 3.8 on a seven-point scale). A possible reason for feeling only moderately prepared may reflect problems with the content of CBM units on offer or the method of content delivery (Jones, 2006; McNally, Panson, Whewell & Wilson, 2005).

When scheduled in programs, mandatory stand-alone CBM units are commonly offered in second or third year. This timing may be related to when the first professional experience placement is scheduled. Most teacher education programs in Australia engage pre-service teachers in professional experience during the first year, mostly limiting the teaching demands to conducting lessons with small groups or assisting individual students (Ingvarson, Beavis, Kleinhenz, & Elliot, 2004). As the need to manage the whole classroom may not be required until the second year of the program, delivering stand-alone CBM content designed for whole-class management in second or third year seems well timed.

The predominant content of stand-alone units and the second highest content category for embedded units was related to theoretical models of management. The inclusion of theoretical models of management is not unique to Australian pre-service CBM units (Banks, 2003; Blum, 1994; Stewart-Wells, 2000). It was clear from examining unit outlines or listed content, that the practice of studying one theoretical model of management per week/session remained common practice. It has been suggested that the superficial treatment of a large number of management models may not be helpful to pre-service teachers (Brophy, 1988; Stewart-Wells, 2000). When models are included in embedded units, Blum (1994) suggested that they may not be thoroughly

covered; a brief overview provided at best. Regardless of the number of models of management included or the depth of information about each model imparted, there is cause for concern as, the effectiveness of most behaviour management models remains to be proven (Brophy, 1988; Jones, 2006).

Information about managing challenging student behaviours was included in almost half the stand-alone and one quarter of the embedded CBM units examined. This is encouraging as it has been established that students with challenging behaviours such as those diagnosed with emotional and behavioural difficulties present teachers with great challenges and stress (Abrahms, 2005; Maag & Katsiyannis, 2006; Westwood & Graham, 2003). What was not clear was whether the knowledge imparted was focused more on describing the characteristics of disorders than on proven intervention strategies. Simply providing pre-service teachers with a guide to behaviour disorders is viewed as ineffective (Peterson & Beloin, 1998), but little research exists to inform teacher educators as to *how* to prepare pre-service teachers in managing students with emotional and behavioural disorders (Harden, Thomas, Evans, Scanlon, & Sinclair, 2003).

The term *evidence-based practice*, or known evidence-based practices in CBM such as functional behavioural assessment (FBA) or school-wide positive behaviour support (PBS) (Dragow, Martin, O'Neill, & Yell, 2009) were seldom part of CBM content. PBS, of which FBA is a component, includes individual as well as system-wide contextual research-based strategies to remediate and prevent inappropriate social and learning behaviours (Lewis, Newcomer, Trussell, & Richter, 2006; Sugai et al., 2000). A growing body of evidence suggests that PBS and FBA are more effective in changing behaviour than alternative approaches (Newcomer & Lewis, 2004; Scott, 2001), through matching treatment to function (Lane, Falk, & Wehby, 2006; Lewis et al., 2006). With the adoption of the PBS framework by educational authorities in some Australian states and territories (Department of Education and Training Northern Territory, n.d; Mooney et al., 2008), it was expected that explicit content on PBS or FBA would be included in more commonly included in units. As PBS adoption in Australia is still relatively new, a lag may exist between what is happening in school systems and teacher preparation curriculum.

Overall, theoretical models of management of CBM predominate over evidence-based practices such as school-wide positive behaviour support in the CBM content offered to pre-service teachers. This lack of evidence-based practice may be related to the lack of interest and expertise in CBM of unit convenors. Few unit convenors or instructors of CBM units had research interests or publications in CBM. This phenomenon is not a local problem (Evertson & Weinstein, 2006; Landau, 2001) and may lead to poor CBM content delivery, especially in embedded CBM units where CBM content may be limited to a few hours of instruction and other content might dominate the unit (Landau, 2001). Stewart-Wells (2000) also suggested that content could be limited to the comfort level or theoretical inclination of the teacher educator.

Limitations

Although a wide range of keywords was used to identify units for inclusion in this study, given the trend of vague descriptions and euphemistic titles in the area of classroom management units (Gore & Parkes, 2007; Landau, 2001; Stough, 2006), it may be possible that some units that contained CBM content were not located. Additionally, for some categories in this study, more detailed information was unavailable, e.g. unit convenor or instructor research interest and

publication history, weekly content schedules, and, prescribed texts, resulting in coding missing fields with *unsure*. Few programs provided public access to full unit outlines and for some units, information about content was drawn from a single paragraph of information.

The accuracy of the information presented in this review depends on the accuracy of information found on the institution websites and Google Scholar. Some unit information may not have been updated to reflect recent changes such as unit convenors or prescribed texts. Some caution is advised in drawing conclusions regarding the hours of face to face instruction, as for some units, information had to be integrated from a number of sources to calculate the hours of instruction, leading to possible inaccuracies. Caution should also be taken in generalising the findings reported for hours allocated to CBM topics in embedded units as few full unit outlines showing weekly topics were located. Inter-rater reliability was very good for many categories examined in this study, but only acceptable to good for research interests of unit convenors; caution should be exercised in interpreting these findings.

Recommendations and future directions

With the recent inclusion of a national teaching standard competency in Australia regarding managing challenging student behaviours (Australian Institute for Teaching and School Leadership, 2011), the inclusion of a mandatory stand-alone CBM unit and perhaps additional cohesive embedded units that provide knowledge, skills, understanding and strategies based on evidence-based practice rather than theory seems imperative in teacher preparation programs. Program designers should consider linking CBM units to scheduled professional experience, minimising the theory to practice gap.

Conducting research using survey or interview techniques with CBM unit convenors and instructors in primary preparation programs could confirm or clarify the findings of this exploratory study and provide greater detail of how and where CBM is embedded within units, what content is being imparted and why, and influences on curriculum design. Longitudinal research into Australian pre-service and novice teacher self-efficacy, preparedness, capabilities, and retention of CBM knowledge from coursework preparation could provide useful information to designers of CBM units. Lastly, research should be conducted that examines the utility and effectiveness of presenting theoretical models of management to pre-service teachers when there is little evidence to suggest that experienced teachers can implement model approaches effectively, or that they lead to enhanced student learning or behavioural outcomes.

References

- Abrahms, B. (2005). Becoming a therapeutic teacher for students with emotional and behavioral disorders. *Teaching Exceptional Children*, 38, 40-46.
- Allen, S. J., & Blackston, A. R. (2003). Training preservice teachers in collaborative problem solving: An investigation of the impact on teacher and student behaviour change in real-world settings. *School Psychology Quarterly*, 18, 22-51.
- Alvarez, H. K. (2007). The impact of teacher preparation on responses to student aggression in the classroom. *Teaching and Teacher Education*, 23, 1113-1126.
doi:10.1016/j.tate.2006.10.001

- Atici, M. (2007). A small-scale study on students teachers' perceptions of classroom management and methods for dealing with misbehaviour. *Emotional and Behavioural Difficulties, 12*, 15-27. doi:10.1080/13632750601135881
- Australian Institute for Teaching and School Leadership (2011, February). National professional standards for teachers. Retrieved from http://www.aitsl.edu.au/verve/_resources/AITSL_National_Professional_Standards_for_Teachers.pdf
- Banks, M. K. (2003). Classroom management preparation in Texas colleges and universities. *International Journal of Reality Therapy, 22*, 48-51.
- Bender, W. N., & Ikechukwu, C. U. (1989). Instructional strategies in mainstream classrooms: Prediction of the strategies teachers select. *Remedial and Special Education, 10*, 23-30.
- Blum, M. H. (1994). *The preservice teacher's educational training in classroom discipline: A national survey of teacher education programs*. (Unpublished doctoral dissertation). Temple University, Pennsylvania.
- Brophy, J. (1988). Educating teachers about managing classrooms and students. *Teaching and Teacher Education, 4*, 1-18.
- Cains, R. A., & Brown, C. R. (1998). Newly qualified teachers: a comparison of perceptions held by primary and secondary teachers of their training routes and of their early experiences in post. *Educational Psychology, 18*, 341-352. doi: 10.1080/0144341980180307
- Clement, M. C. (2002). What cooperating teachers are teaching student teachers about classroom management. *The Teacher Educator, 38*, 47-62. doi: 10.1080/08878730209555306
- Cothran, D. J., Kulinna, P. H., & Garrahy, D. A. (2003). "This is kind of giving a secret away...": students' perspectives on effective class management. *Teaching and Teacher Education, 19*, 435-444. doi: 10.1016/S0742-051X(03)00027-1
- Department of Education and Training Northern Territory. (n.d). *School Wide Positive Behaviour Support*. Retrieved from <http://www.det.nt.gov.au/teachers-educators/students-learning/safety-wellbeing/behaviour/swpbs>
- Doyle, W. (1986). Classroom organization and management. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 392-431). New York, NY: Macmillan.
- Drasgow, E., Martin, C. A., O'Neill, R. E., & Yell, M. L. (2009). Functional behavioral assessments and behavior intervention plans. In M. L. Yell, N. B. Meadows, E. Drasgow, J. G. Shriner (Eds.), *Evidence-based practices for educating students with emotional and behavioral disorders* (pp. 92-130). Upper Saddle River, NJ: Pearson.
- Emmer, E. T., & Stough, L. M. (2001). Classroom management: A critical part of educational psychology, with implications for teacher education. *Educational Psychologist, 36*, 103-112.
- Evertson, C. M., & Weinstein, C. S. (2006). Classroom management as a field of enquiry. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management. Research, practice, and contemporary issues* (pp. 1-16). Mahwah, NJ: Lawrence Erlbaum.
- Farkas, S., & Duffett, A. (2010). *Cracks in the ivory tower. The views of education professors circa 2010*. Dayton, Ohio: Thomas B. Fordham Institute and Foundation. Retrieved from <http://www.edexcellence.net/assets/docs/cracks-ivory-tower-full.pdf>
- Geving, A. M. (2007). Identifying the types of students and teacher behaviours associated with teacher stress. *Teaching and Teacher Education, 23*, 624- 640. doi:10.1016/j.tate.2007.02.006

- Giallo, R., & Little, E. (2003). Classroom behaviour problems: The relationship between preparedness, classroom experiences and self-efficacy in graduate and student teachers. *Australian Journal of Educational and Developmental Psychology*, 3, 21-34.
- Goddard, R., & Goddard, M. (2006). Beginning teacher burnout in Queensland schools: Associations with serious intentions to leave. *The Australian Educational Researcher*, 33, 61-75.
- Goddard, R., & O'Brien, P. (2003). Beginning teacher perceptions of their work, well-being and intention to leave. *Asia Pacific Journal of Teacher Education and Development*, 6, 99-188.
- Goodlad, J. I. (1990). *Teachers for our nation's schools*. San Francisco, CA: Jossey Bass Publishers.
- Gore, J. M., Griffiths, T., & Ladwig, J. G. (2004). Towards better teaching: productive pedagogy as a framework for teacher education. *Teaching and Teacher Education*, 20, 375-387. doi:10.1016/j.tate.2004.02.010
- Gore, J. M., & Parkes, R. J. (2007). On the mistreatment of management. In A. Phelan and J. Sumsion (Eds.), *Critical reading in teacher education*, (pp. 1-16). New York, NY: Sense Publishing.
- Harden, A., Thomas, J., Evans, J., Scanlon, M., & Sinclair, J. (2003). *Supporting pupils with emotional and behavioural difficulties (EBD) in mainstream primary schools: a systematic review of recent research on strategy effectiveness (1999 to 2002)*. London: Social Science Research Unit, Institute of Education, EPPI-Centre, University of London. Retrieved from <http://eppi.ioe.ac.uk/cms/LinkClick.aspx?fileticket=QIJ2ApVd%2fTk%3d&tabid=125&mid=934&language=en-US>
- Hattie, J. A. C. (2009). *Visible learning. A synthesis of over 800 meta-analyses relating to achievement*. Abingdon, UK: Routledge.
- Higgins, K. M., & Moule, J. (2009). "No more Mr. Nice Guy": Preservice teachers' conflict with classroom management in a predominantly African-American urban elementary school. *Multicultural Perspectives*, 11, 132-138. doi:10.1080/15210960903116530
- Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60, 30-33.
- Ingvarson, L. C., Beavis, A., & Kleinhenz, E. (2004). *Teacher education courses in Victoria: Perceptions of their effectiveness and factors affecting their impact*. A report prepared for the Victorian Institute of Teaching, Future Teachers Project. Retrieved from http://research.acer.edu.au/teacher_education/4
- Ingvarson, L., Beavis, A., Kleinhenz, E., & Elliot, A. (2004). *Pre-service teacher education in Australia: A mapping study of selection process, course structure and content, and accreditation processes*. Report prepared for MCEETYA Taskforce on Teacher Quality and Educational Leadership. Melbourne, Australia: ACER. Retrieved from http://research.acer.edu.au/teacher_education/3
- Jones, V. (2006). How do teachers learn to be effective classroom managers? In C. M. Evertson & C. S. Weinstein (Eds), *Handbook of classroom management. Research, practice, and contemporary issues* (pp. 887-908). Mahwah, NJ: Lawrence Erlbaum.
- Jones, S. D., & Messenheimer-Young, T. (1989). Content of special education courses for preservice regular education teachers. *Teacher Education and Special Education*, 12, 154-159.

- Kaufman, D., & Moss, D. M. (2010). A new look at preservice teachers' conceptions of classroom management and organization: Uncovering complexity and dissonance. *The Teacher Educator*, 45, 118-136. doi:10.1080/08878731003623669
- Kazdin, A. E. (1982). *Single-case research designs*. New York, NY: Oxford University Press.
- Kounin, J. S. (1970). *Discipline and group management in classrooms*. New York, NY: Holt, Reinhart & Winston.
- Landau, B. E. (2001, April). *Teaching classroom management: A stand-alone necessity for preparing new teachers*. Paper presented at the Annual meeting of the American Educational Research Association, Seattle, WA.
- Lane, K., Falk, K., & Wehby, J. (2006). Classroom management in special education classrooms and resource rooms. In C. M. Evertson & C. S. Weinstein (Eds), *Handbook of classroom management. Research, practice, and contemporary issues* (pp. 439-460). Mahwah, NJ: Lawrence Erlbaum.
- Larson, W. C., & Goebel, A. J. (2008). Putting theory into practice: a professional development school/university co-teaching project. *Journal of the Scholarship of Teaching and Learning*, 8, 52-61.
- Lee, S., & Powell, J. V. (2005-2006). Using computer-based technology to determine emergent classroom discipline styles in preservice teacher education. *Journal of Educational Technology Systems*, 34, 83-110.
- Lewis, T. J., Newcomer, L. L., Trussell, R., & Richter, M. (2006). Schoolwide positive behavior support: Building systems to develop and maintain appropriate social behavior. In C. M. Evertson & C. S. Weinstein (Eds), *Handbook of classroom management. Research, practice, and contemporary issues* (pp. 833-854). Mahwah, NJ: Lawrence Erlbaum.
- Little, E. (1999). *Conduct Disorder: Generalisation across settings and implications for home and school based interventions*. Unpublished doctoral dissertation, RMIT University, Victoria. Australia.
- Louden, W., Rohl, M., Gore, J., McIntosh, A., Greaves, D., Wright, R., Siemon, D., House, H. (2005). *Prepared to Teach: An investigation into the preparation of teachers to teach literacy and numeracy*. Canberra: Department of Education, Science and Training. Retrieved from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/prepared_to_teach.htm
- Maag, J. W., & Katsiyannis, A. (2006). Behavioural intervention plans: Legal and practical considerations for students with emotional and behavioural disorders. *Behavioural Disorders*, 31, 348-362.
- McNally, J., Panson, J., Whewell, C., & Wilson, G. (2005). They think swearing is okay: first lessons in behaviour management. *Journal of Education for Teaching*, 31, 169-185. doi: 10.1080/02607470500169006
- Main, S., & Hammond, L. (2008). Best practice or most practiced? Pre-service teachers' beliefs about effective behaviour management strategies and reported self-efficacy. *Australian Journal of Teacher Education*, 33, 28-39.
- Martin, S. (2004). Finding a balance: impact of classroom management conceptions on developing teacher practice. *Teaching and Teacher Education*, 20, 405-422. doi: 10.1016/j.tate.2004.04.002

- Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works. Research-based strategies for every teacher*. Alexandria, VA: Association for Supervision and Development.
- Mergler, A. G., & Tangen, D. (2010). Using microteaching to enhance teacher efficacy in pre-service teachers. *Teaching Education, 21*, 199-210. doi:10.1080/10476210902998466
- Mooney, M., Dobia, B., Barker, K., Power, A., Watson, K., & Yeung, A. S. (2008). *Positive behaviour for learning: Investigating the transfer of a United States system into the New South Wales Department of Education and Training Western Sydney Region schools*. Penrith, New South Wales: University of Western Sydney, School of Education and the Centre for Educational Research.
- Morales, C. A. (2001). Discipline: Applicable techniques for student teachers. *Education, 101*, 115-117.
- Newcomer, L., & Lewis, T. J. (2004). Functional behavioral assessment: An investigation of assessment reliability and effectiveness of function-based interventions. *Journal of Emotional and Behavioral Disorders, 12*, 168-181.
- Oliver, R. M., & Reschly, D. J. (2007). *Effective classroom management: Teacher preparation and professional development*. TQ Connection Issue Paper on improving student outcomes in general and special education. Washington: National Comprehensive Centre for Teacher Quality. Retrieved from <http://www.tqsource.org/topics/effectiveClassroomManagement.pdf>
- Peterson, M., & Beloin, K. S. (1998). Teaching the inclusive teacher: Restructuring the mainstream course in teacher education. *Teacher Education and Special Education, 21*, 306-318.
- Pigge, F. L., & Marso, R. N. (1997). A seven year longitudinal multi-factor assessment of teaching concerns development through preparation and early years of teaching. *Teaching and Teacher Education, 13*, 225-235.
- Putman, S. M. (2009). Grappling with classroom management: The orientations of preservice teachers and impact of student teaching. *The Teacher Educator, 44*, 232-247. doi:10.1080/08878730903180226
- Reupert, A., & Woodcock, S. (2010). Success and near misses: Pre-service teachers' use, confidence and success in various classroom management strategies. *Teaching and Teacher Education, 26*, 1261-1268. doi:10.1016/j.tate.2010.03.003
- Sanderson, D. R. (2004). Classroom management students observing student teachers: A win-win combination. *Essays in Education, Vol. 9*. Retrieved from <http://www.usca.edu/essays/vol92004/sanderson.pdf>
- Scales, P. (1994). Strengthening middle grade teacher preparation programs. *Middle School Journal, 26*, 59-65.
- Scott, T. M. (2001). A school-wide example of positive behavioral support. *Journal of Positive Behavioral Interventions, 3*, 88-94.
- Siebert, C. J. (2005). Promoting preservice teachers' success in classroom management by leveraging a local union's resources: A professional development school initiative. *Education, 125*, 385-392.
- Stewart-Wells, G. (2000). *An investigation of student teacher and teacher educator perceptions of their teacher education programs and the role classroom management plays or should play in preservice education*. Unpublished doctoral dissertation, The Claremont Graduate University, San Diego.

- Stough, L. (2006). The place of classroom management in the standards in teacher education. In C. M. Evertson & C. S. Weinstein (Eds), *Handbook of classroom management. Research, practice, and contemporary issues* (pp. 909 - 924). Mahwah, NJ: Lawrence Erlbaum.
- Stough, L., Montague, M. L., Landmark, L. J., & Williams-Diehm, K. L. (2006, April). *The effectiveness of different models of classroom management instruction*. Paper presented at the American Educational Research Association Conference, San Francisco, CA.
- Stough, L., Williams-Diehm, K., & Montague, M. (2004, November). *Classroom management content in teacher preparation programs*. Paper presented at the Teacher Education Division of the Council for Exceptional Children, Albuquerque, NM.
- Stoughton, E. H. (2007). "How will I get them to behave?": Pre service teachers reflect on classroom management. *Teaching and Teacher Education, 23*, 1024-1037. doi:10.1016/j.tate.2006.05.001
- Sugai, G., Horner, R. H., Dunlap, G., Hieneman, M., Lewis, T. J., Nelson, C. M., ... Rief, M. (2000). Applying positive behavior support and functional behavioral assessment in schools. *Journal of Positive Behavior Interventions, 2*, 131-143.
- Tingstrom, D. H. (1989). Increasing acceptability of alternative behavioral interventions through education. *Psychology in the Schools, 26*, 188-194.
- Van Laarhoven, T. R., Munk, D. D., Lynch, K., Bosma, J., & Rouse, J. (2007). A model for preparing special and general education preservice teachers for inclusive education. *Journal of Teacher Education, 58*, 440-455. doi: 10.1177/0022487107306803
- Wagler, R., & Moseley, C. (2005). Preservice teacher efficacy: Effects of a secondary education methods course and student teaching. *Teacher Education and Practice, 18*, 442-457.
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1993). Toward a knowledge base for school learning. *Review of Educational Research, 63*, 249-294.
- Wesley, D. A., & Vocke, D. E. (1992, February). *Classroom discipline and teacher education*. Paper presented at the Annual Meeting of the Association of Teacher Educators, Orlando, FL.
- Westwood, P., & Graham, L. (2003). Inclusion of students with special needs: Benefits and obstacles perceived by teachers in New South Wales and South Australia. *Australia Journal of Learning Disabilities, 8*, 3-15.
- White, C. Y., & Elkins, J. (2000). Preservice primary education and the teaching of students with learning difficulties or with disabilities in the areas of numeracy and literacy. In Kraaynoord & J. Elkins (Eds.), *Literacy, numeracy and students with disabilities. Volume 4. Teacher Education* (pp. 21-45). Canberra: DETYA Clearing House.

Acknowledgement

The authors would like to sincerely thank JH who inspired this mission of discovery.