

School Leadership Review

Volume 14
Issue 2 *Building Capacity for Leadership and
Social Change in Rural PK-12 Settings*

Article 6

2019

Professional Learning in Trauma Informed Positive Education: Moving School Communities from Trauma Affected to Trauma Aware

Helen Stokes
University of Melbourne, h.stokes@unimelb.edu.au

Tom Brunzell
Berry Street, Children and Family Services

Follow this and additional works at: <https://scholarworks.sfasu.edu/slr>

 Part of the [Educational Leadership Commons](#), and the [Teacher Education and Professional Development Commons](#)

Tell us how this article helped you.

Recommended Citation

Stokes, Helen and Brunzell, Tom (2019) "Professional Learning in Trauma Informed Positive Education: Moving School Communities from Trauma Affected to Trauma Aware," *School Leadership Review*: Vol. 14 : Iss. 2 , Article 6.

Available at: <https://scholarworks.sfasu.edu/slr/vol14/iss2/6>

This Article is brought to you for free and open access by the Secondary Education and Educational Leadership at SFA ScholarWorks. It has been accepted for inclusion in School Leadership Review by an authorized editor of SFA ScholarWorks. For more information, please contact cdsscholarworks@sfasu.edu.

Introduction

Students living in rural communities must contend with many factors including lower educational outcomes, lower high school graduation rates, and lower achievement scores (Sullivan, 2018; Sullivan, McConney, & Perry, 2018). Further, the frequency of childhood trauma from abuse and/or neglect within rural communities is alarmingly high. Inclusive of childhood trauma, adverse childhood experiences (ACEs) include when a child's family members experience substance abuse, family instability, violence, incarceration and other detrimental impacts to wellbeing and health. In a recent study investigating the rates of ACEs with a large sample located in rural communities ($N = 800$), 62% reported at least one ACE and 15% reported four or more ACEs (Iniguez & Stankowski, 2016).

This article provides insight into the experiences of a rural primary school which undertook a systematic process of professional learning in trauma-informed education over the course of one-school year. Drawing on empirical data from this study, we argue that when disadvantaged schools within rural communities are reframed as *trauma-affected* schools, new pathways toward whole-school intervention can help schools meet the complex unmet needs of their students. Once school leaders acknowledge ACEs and childhood trauma as contributing factors to intergenerational community disadvantage, they can then embark on a journey towards becoming *trauma-aware*. In this study the leaders were able to redefine their school as trauma-aware and therefore drive school pedagogy, procedures and policies based on the knowledge of childhood trauma's impacts on neurodevelopment, learning, and life-outcomes (Ko, 2008; Howard, 2019).

Trauma-Informed Positive Education (TIPE) in the classroom

Teachers often interpret resistant student behaviour (i.e., behaviour often labelled distracting, attention-seeking, resistant, oppositional, bullying behaviour, etc.) as a 'choice' the student is making to assert themselves in the classroom. However, trauma-aware perspectives prompt teachers to reflect on the underlying causes of behaviour and the attempts the student is making to meet their own needs. Often, classroom behaviour *is* meeting a need for the student, but the behaviour is a maladaptive and a compensatory response to classroom adversity.

Trauma can be helpfully defined as an overwhelming feeling that the world is no longer good nor safe (Brunzell, Stokes & Waters, 2019). In the aftermath of ACEs, left unmanaged and uncared for, trauma negatively impacts child development (Australian Childhood Foundation, 2010), language, memory and cognitive capacity (Downey, 2007), and the child's ability to make and sustain strong attached relationships within the classroom (Wolpow et al., 2009). Within trauma-aware teacher practice, the classroom is often positioned

as the most stable, predictable and frequented daily environment in a young person's life; and therefore, has the potential to be a healing environment for the student (Cole et al., 2005; Downey, 2007). On this journey, trauma-aware teachers can begin to see themselves on the front-line for childhood trauma work wherein their classroom based-relationships with students can be a key component as a stable, predictable influence on a student's growth and development (Brunzell, Waters & Stokes 2015).

Based upon a systematic literature review of trauma-aware practice models and of the student wellbeing literature, a new evidence-informed model arose to meet dual-concerns within the classroom for *healing* and *growth*: trauma-informed positive education (TIPE) (Brunzell, Stokes, & Waters, 2016).

TIPE was conceived as a pedagogical practice model for teachers to learn as a whole-school approach to supporting trauma-affected students and is predicated on three domains: (domain 1) increasing self-regulatory abilities, (domain 2) increasing relational capacities, and (domain 3) increasing psychological resources for student wellbeing. These three domains are conceived as developmental aims to strengthen teacher practice with the knowledge of underlying causes of student resistance and other concerning classroom behaviours.

Existing models of trauma aware education typically take a two-tiered approach to learning. Such approaches first aim to repair the student (e.g., addressing a lack of self-regulatory skills and relational abilities), and then adjust learning strategies to the developmental capacities that the student faces (Brunzell, et al, 2015). In contrast, TIPE takes a three-tiered approach to learning, which is grounded in a strengths-based perspective. Like other models, Tier 1 begins with repairing the student's regulatory abilities. Tier 2 focuses on repairing disrupted attachments. Building upon prior trauma aware models, Tier 3 focuses on increasing the young person's psychological resources, drawing on the young person's strengths to promote post-traumatic growth. By focusing on healing while simultaneously providing pathways towards post-traumatic growth, TIPE expands the possibilities for teaching and learning in the classroom.

TIPE seeks to facilitate student engagement through *bottom-up* integration with *top-down* strategies. Bottom-up integration suggests that students require multiple-opportunities during the day to align and connect their body's internal capacities, including regulation of the stress response and co-regulation through strong attached relationships. Schore and Schore (2008) suggest left uncared for, trauma-affected individuals do not have the ability to effectively learn and employ top-down strategies without these bottom-up priorities. Here, top-down refers to the thinking strategies (i.e., activating a growth mindset, listening for one's internal self-talk, reframing a challenge through one's strengths) that require a well-regulated brain and body to listen,

learn and apply the strategies in every-day situations. The aim is that by combining bottom-up integration with top-down strategies, teachers can work together to develop effective classroom approaches for the myriad of abilities, capacities and strengths required within their classrooms.

Trauma-aware approaches within schools (including TIPE) have been the subject of robust investigation and implementation (Berger, 2019). Berger identifies a key leadership strategy to implement whole-school trauma-aware practice: when leaders increase collective teacher efficacy through nurturing a professional learning culture. Teacher collective efficacy is defined as a shared belief among staff that their actions can positively influence student outcomes (Donohoo, Hattie & Eells, 2018). Every staff member in the school should have opportunities to understand the impacts of childhood trauma on learning and to apply this learning as whole-school strategies aimed at creating consistent and predictable environments in which students can effectively learn.

The impact of effective professional learning

For teachers and school leaders in rural areas, accessing effective professional learning is potentially difficult as it often located in larger regional areas or cities (Dinham, Elliott, Rennie & Stokes 2018; Stokes, Holdsworth & Stafford, 1999). Dinham and colleagues (2018) identify professional learning for both leaders and teachers as essential to school improvement and changing school culture. There is considerable debate on the effectiveness of professional learning (Opfer & Pedder, 2011). Robinson, Lloyd and Rowe's (2008) meta-analysis of the impact of leadership on student achievement found that the leadership activity that impacted greatest on student achievement was the involvement of leadership in informal and formal professional learning.

Hattie (2012) defines *effect sizes* as measures of the impact of educational initiatives on academic achievement. He designates 0.4 as the hinge point (i.e. the point at which the initiative is having a greater than average impact on academic achievement as one average year of growth), an effect size of 0.6 as having greater than a year's growth regarding academic achievement, and an effect size of 1.0 as over 2 years of growth.

When leadership positions themselves as lead learners, participating in professional development activities with their staff group, this has an effect size of .84 compared to other leadership activities of between .27 and .42. The involvement of leadership in professional learning for teachers that addresses improving teacher quality links to Hattie's (2008) findings that teachers and teacher quality are the most important school level influence regarding student learning and achievement.

Further research has led to the identification of qualities of professional learning that assist in changing teacher practice, which in turn increases improvements in student achievement, wellbeing and engagement. These

qualities include: relating the professional learning to the learning needs of the students, understanding the relationship between teaching and student outcomes, providing usable content that integrates theory and practice, and utilising external expertise and providing opportunities to trial the learning in the classroom (Robinson & Gray, 2019; Timperly & Alton-Lee, 2008).

Method

The data is drawn from an empirical study of TIPE that was implemented in mainstream schools in Victoria, Australia (Stokes & Turnbull, 2016). This article focusses on the data from the rural school that was part of the larger study to further explore the impact of leadership of professional development in the school and the implementation of TIPE. The data from the rural school is one of only two studies identified through a systemic review of trauma informed approaches in schools worldwide that drew data from rural schools (Berger, 2019). While the other study (Hansel et al, 2010) was located in the USA, Berger (2019) noted the similarity in trauma-informed classroom strategies for both studies.

The larger TIPE study was conducted using a range of both quantitative and qualitative data. The data drawn from the rural school included: Quantitative data including a pre-implementation survey completed by all students in grades five and six on their attitudes to school and a follow up survey one-year later, teacher judgement data for all students in years five and six for reading, writing and numeracy before implementation and after one-year, and student suspension data for the whole school before implementation and after one-year. Qualitative data including pre-implementation interviews with school leadership, teachers and students (grades five and six) and further interviews with leadership, teachers and students (grades five and six) after one-year of implementation.

The school context

The primary school featured in this study is in a rural area that could be described as trauma-affected with high levels of unemployment and socio-economic disadvantage. This was reflected in the school population. The school principal commented:

A lot of the kids are from broken homes ... 70% to 80% have no positive male role model ... we have a number of kids in out-of-home or foster care ... a high number 'at risk'.

At the time the data was collected, over 50% of the student population were subject to intervention orders from state child protection services. The majority of students were 12 – 18 months behind achievement standards compared to state average on entry to school and were not making up that gap by the time they reached year three.

One of the school's biggest challenges was the level of socio-economic disadvantage and disfunction among the families that then played out as negative behaviours in school. Teachers pointed to the amount of time taken away from classroom instruction by dealing with incidents happening in the school playground and then being brought back to the classroom. As one teacher commented:

We constantly have to take time to sort the incidents out when we should be teaching the class. They might be relatively settled in class but we're still having to spend 10-15 minutes after lunch just dealing with lunch-time issues ...

School leadership underlined the connection between 'incidents' and:

... all the stuff the kids bring in with them ... Most of the issues are related to home and that's out of our control ... Kids are often late in ... might miss the first half hour then it might take another half-hour to feel in the mood for learning. Some kids might be doing alright in class but if they've had a bad morning it takes them a while to engage ... The academic stuff tends to come second because the kid's welfare is the priority. If they're not happy, they won't learn ... Lots of the kids are well below standard ... and most don't move very high. We can't control the home background – it's more challenging than behaviours.

There had been a concerted effort to change school culture over time. There was agreement amongst the school community that: mainstream teaching approaches and pedagogies were failing to meet the needs of significant numbers of students; student populations were confronting diverse and complex challenges; and teachers were confronting significant professional and personal challenges in dealing with the diversity of student need (Stokes & Turnbull 2016).

Findings and Discussion

The professional development for teachers, TIPE, was designed and presented using the key qualities that define effective professional learning. While Robinson and Gray (2019) identify relating the professional learning to the learning needs of students, the TIPE professional learning extended this to work with both the learning *and wellbeing needs* of students. The teachers began to understand what it meant to be trauma-aware in a school where the students were trauma-affected. The TIPE model was presented to staff through a sequence of professional development training sessions sequenced over a 12-month time frame. This training was supported by a suite of curriculum materials. They were specifically geared to the needs of the setting and aimed to increase teacher capacity to work with challenging students. As one teacher commented:

What stands out is that stuff we've learned we can implement straight away. The strategies and brain breaks are short, sharp and specific ... but they're relevant to all the kids. The training reminds you ... make sure your kids are ready to learn.

The usability in the classroom was emphasised with another teacher commenting:

All this stuff can be used by ourselves. It's really important that we're modelling it, using the strategies when we're having a difficult moment.

In addition to being able to trial strategies in the classroom, the leadership group continued to develop a professional learning culture among the staff in between the training sessions delivered by the TIPE trainers. The strategies were shared and reinforced at weekly staff meetings where the teachers modelled and shared activities they were finding successful. Examples of activities included mindfulness-focused activities such as deep breathing and visualising a colour to represent emotion as settling devices before the reading lesson or after lunch. Another aspect of the development of a professional learning culture was the involvement of the leadership team in the professional learning. One of the teachers commented that this reinforced teamwork at the school and perceived there being no barriers between the teachers, education support staff, wellbeing staff and the principal. The principal in turn commented that the professional learning was:

{a}imed at the teachers in a way they could understand ... I loved every minute of it. Our professional development had previously looked a lot at teaching and learning. Now was the time to look at behaviour ... getting the kids into a position where they could learn.

Meeting another of the key criteria for professional learning, that of integrating theory and practice (Robinson & Gray 2019), the principal commented that the professional learning in TIPE delivered:

[t]he theory and strategies to support our existing philosophy. We knew we needed to be supporting the 'whole child', academically and emotionally, to keep them engaged ... the [TIPE] model has given us the reasons for what we have been doing.

Many key strategies (both bottom-up and top-down) that teachers learned through the professional development were then customised by the teachers to deliver first as ways to enable the children to be ready for learning and then through the curriculum to enhance student achievement. The following provides a sequence of activities that the teachers delivered to their students in year five.

First came a focus on self-regulation (Tier 1 of the model). As mentioned before, many of the students came in from lunch time unsettled from incidents that happened in the playground. The teachers became more aware of these behaviours and spent time deliberately transitioning the children through daily routines so they were ready to learn prior to using TIPE strategies within their curriculum delivery.

One of the teachers commented:

We might get them to do a [mindfulness-related] breathing activity before they come in ... Eyes closed, hands on belly, feel your breath, focus on breathing deeply ... it stops conversation, calms them down ... they're a bit more settled to start work ... in the past, I'd just herd them all in ... It's a lot to do with me having control ... 'keeping the power' in control of the grade.

As one of the students who enjoyed the breathing exercises noted:

I like to learn but people distract me. When we're lining up, I get stressed by everyone screaming, crowding ... everyone arguing, yelling, and getting mad about what's just happened in the playground.

Once settled, the teacher would then use one of the strategies incorporated within the curriculum they were delivering. In this case the focus was on literacy stamina. In the year 5 class the teachers connected the concept of developing stamina with reading activities they were undertaking in the class.

The 'stamina for reading' activity was conducted over seven weeks. One student described what they did to set reading goals using a focus strategy:

How it works is - we all start reading at the same time, if one person mucks up during reading or gets distracted – they stop the timer and we go and sit on the floor to refocus ourselves. Our goal is not to get distracted and not to look up from our books.

Both the students and the grade teachers reported an improvement in the students' capacity to focus and pay attention to a reading task. They progressed from an initial 36-seconds to 16-minutes (and, ultimately, 20-minutes). The students commented that they were proud of themselves, it made them happy, and it was easier as they practiced the activity over time.

The self-reporting by the students was further confirmed by an effect size analysis of the teacher judgement data for reading. Accordingly, effect sizes were drawn from comparison of teacher judgement data over the time frame of a year (pre- and post-intervention). The year five class who undertook the 'stamina for reading activity' recorded an effect size of 2.09 in reading (average growth is 0.4 per year) The grade 6 students who had participated in other TIPE activities to assist them to be ready to learn but not activities specifically related

to specific reading outcomes recorded an effect size of 1.18 in reading. This is still significant growth in comparison to the average effect size of 0.4.

The analysis of the students' attitudes to school survey data also reflected an increase regarding feeling connected to school and confidence with their learning. This was then backed up by overall school data that showed a decrease in suspensions over one-year from 57 students down to seven students. Teachers reported that they understood where their students were coming from and as a result were better able to manage their classroom environments with the strategies provided through the professional learning.

The principal noted that the TIPE model (with its three tiers) was taken up by teachers across the school, that they were using the TIPE strategies and these became ingrained into the way teachers were teaching. This can be illustrated through the sequential tiers (one through to three) that the teachers learned, practiced and modelled throughout the year.

In TIPE Tier 1, Increasing Self-Regulatory Abilities, the focus of this domain was to assist teachers to help students manage their own stress-response escalation (see for example van der Kolk, 2003). Trauma can directly impact a student's ability to manage their own stress response when the student is challenged to learn new content, provoked by other students in seemingly inconsequential situations, or when the student is struggling to stay focused on the task at hand. Effective strategies in this domain sought to help the student first understand the effects of stress on their own brain and body and then practice proactive strategies to de-escalate their own stress response and proactively seek support. Other priorities within this domain were to ensure that all staff through a whole-school approach privilege increasing self-regulation by aligning the body's sensory integration through rhythmic routines throughout the school day (i.e., consistent ways of running daily classroom meetings, transition routines between subjects, regular opportunities for rhythmic physical movement).

Following on from this in TIPE Tier 2: Increasing Relational Capacities, the focus of this tier was to assist teachers to help students form and maintain durable classroom-based relationships. Healthy, classroom-based relationships are an indicator of student academic success and wellbeing (Cornelius-White, 2007). Trauma disrupts an individual's ability to form relational attachments that can serve as critical buffers in times of stress. Sadly, in the case of childhood trauma, the adults within the family that were meant to care for and nurture the child were often the sources of relational trauma and/or neglect. From a trauma-aware perspective, increasing relational capacities requires teachers to understand that strong, attached relationships are formed through co-regulatory experiences, in which the teachers were often positioned side-by-side, attuned to the student and his/her needs, and was actioned through unconditional positive regard.

In the final sequential TIPE Tier 3, Increasing Psychological Resources for Student Wellbeing, this developmental Tier in TIPE unified the aims of healing and growth in the classroom. The skills and strategies to deliberately build the psychological resources to understand and extend student wellbeing were positioned as the next developmental step following Tiers 1 and 2. Within Tier 3, teachers are prompted to focus on psychological skills such as stamina for learning, resilient self-talk, growth mindset and character strengths (Brunzell et al., 2016).

This sequential structure was modelled by the leadership team through the professional learning. Through this, all staff learned and then practiced this sequence. The staff were shown that for students in a trauma-affected school, it was important to prioritise the student's physical capacities first. As two of the teachers commented:

The students need to be de-escalated before you can move on to the next stage... it is important to build a self-regulated body before you can think about teaching values and character strengths.

You need one element after another, everything builds on the previous domain ... The sequence is very important ... you need to go with the sequence ... Get the kids internalising and understanding how they are reacting then start building the relationship.

There was one other significant outcome from the professional learning for the teachers involved that increased their ability to assist students to be ready to learn. The teachers mentioned that the professional learning enhanced *their own* self-regulatory capacities, their resilience and their stamina. While learning to work with students they also learned the strategies for themselves. As one of the teachers commented:

As a teacher you get overwhelmed ... the strategies work to get adults to de-escalate ... they can be very beneficial.

While another found:

I find I'm not yelling as much ... I don't like doing that ... the other kids don't need to hear a raised voice... I've made a conscious effort to do that ... and, in return, I feel less need to do it. Talking things through is a better option.

Our data suggests that TIPE can be a dual-pathway towards becoming a trauma-aware school. If the first pathway is to implement effective student strategies, the second emergent pathway is to support leaders and their staff. The future direction of our research is to specifically follow leadership teams to better understand the implications of TIPE on leadership capacity and

leadership wellbeing as leaders strive to meet the needs of their school communities.

Conclusion

While the scope of the research was limited to one rural school, there were growth outcomes from both student achievement and wellbeing through delivery of professional learning in and subsequent implementation of TIPE. The professional learning was delivered with the key features of effective professional learning to change teacher practice (Robinson & Gray, 2019; Timperly & Alton-Lee, 2008). The school leadership and teachers had to first acknowledge the need for alternative pedagogical approaches to address the needs of students with adverse childhood experiences. The professional learning in TIPE assisted both the school leadership and teachers to understand that they were educating in a trauma-affected school and the need therefore to realign their thinking and practices in regard to this. It required a shift in school culture that moved from one of blaming the students for their backgrounds and behaviours to one of understanding where the students were coming from and then working with them through the sequential stages of the model so that the students experienced both healing and growth. As one teacher commented:

We had to struggle with behaviours at first ... now having had all these strategies, we can sit back and say, well, they weren't so bad after all. The strategies really helped. For most of the year, it's been easy to have a positive mind-set as a teacher.

This professional learning in TIPE and subsequent implementation has developed the collective teacher efficacy at this school. The leaders and teachers believed that working together they could make a difference to the academic and wellbeing outcomes for their students, even those students from the most disadvantaged backgrounds.

References

- Australian Childhood Foundation. (2010). *Making SPACE for learning trauma informed practice in schools*. Ringwood, VIC: Author. Retrieved from www.childhood.org.au.
- Berger, E. (2019). Multi-tiered approaches to trauma-informed care in schools: A systematic review. *School Mental Health*, 1-15. doi.org/10.1007/s12310-019-09326-0
- Brunzell, T., Waters, L., & Stokes, H. (2015). Teaching with strengths in trauma-affected students: A new approach to healing and growth in the classroom. *American Journal of Orthopsychiatry*, 85(1), 3-9.
- Brunzell, T., Stokes, H., & Waters, L. (2016). Trauma-Informed Positive Education: Using positive psychology to strengthen vulnerable students.

- Contemporary School Psychology*, 20, 63-83. DOI: 10.1007/s40688-015-0070-x
- Brunzell, T., Stokes, H., & Waters, L. (2019). Shifting teacher practice in trauma-affected classrooms: Practice pedagogy strategies within a trauma-informed education model, *School Mental Health*, 11(3), 600-614.
- Cole, S., Greenwald, J., Gadd, M. G., Ristuccia, J., Wallace, D. L., & Gregory, M. (2009). *Helping traumatized children learn: supporting school environments for children traumatized by family violence*. Boston: Massachusetts Advocates for Children.
- Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research*, 77(1), 114-143.
- Dinham, S., Elliott, K., Rennie, L., & Stokes, H. (2018). *I'm the Principal*. Melbourne Victoria: ACER.
- Donohoo, J., Hattie, J., & Eells, R. (2018). The power of collective efficacy. *Educational Leadership*, 75(6), 40-44.
- Downey, L. (2007). *Calmer classrooms: A guide to working with traumatised children*. Melbourne: Office of Child Safety Commissioner.
- Eells, R.J. (2011). *Meta-analysis of the relationship between collective teacher efficacy and student achievement*. Dissertations. Paper 133. http://ecommons.luc.edu/luc_diss/133
- Hansel, T., Osofsky, H., Osofsky, J., Costa, R., Kronenberg, M., & Selby, M. (2010). Attention to process and clinical outcomes of implementing a rural treatment program. *Journal of Traumatic Stress*, 23(6), 708-715.
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.
- Hattie, J. (2012). *Visible learning for teachers*, New York, Routledge.
- Howard, J.A. (2019). A Systemic Framework for Trauma-Informed Schooling: Complex but Necessary!, *Journal of Aggression, Maltreatment & Trauma*, 28(5), 545-565. DOI: [10.1080/10926771.2018.1479323](https://doi.org/10.1080/10926771.2018.1479323)
- Iniguez, K. C., & Stankowski, R.V. (2016). Adverse childhood experiences and health in adulthood in a rural population-based sample. *Clinical medicine & research*, 14(3-4), 126-137.
- Ko, S.J., et al., (2008). Creating trauma-informed systems: Child welfare, education, first responders, health care, juvenile justice. *Professional Psychology*, 39(4), 396-404.
- Opfer, V., & Pedder, D. (2011). Conceptualising teacher professional learning. *Review of Educational Research*, 81(3), 376-407.
- Robinson, V., Lloyd, C., & Rowe, K. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*, 44(5), 635-674.

- Robinson, V., & Gray, E. (2019). What difference does school leadership make to student outcomes? *Journal of the Royal Society of New Zealand*, 49(2), 171-187.
- Schore, J.R., & Schore, A.N. (2008). Modern attachment theory: The central role of affect regulation in development and treatment. *Clinical Social Work Journal*, 36, 9-20.
- Stokes, H., Stafford, J., & Holdsworth, R (1999). *Rural and Remote School Education: A survey for the Human Rights and Equal Opportunity Commission Final Report*, University of Melbourne
- Stokes, H., & Turnbull, M. (2016). *Evaluation of the Berry Street Education Model: Trauma Informed positive education enacted in mainstream schools*, Melbourne, Victoria, University of Melbourne, Melbourne Graduate School of Education, Youth Research Centre.
- Sullivan, K. (2018). *How do school resources and learning environments differ across Australian rural, regional and metropolitan communities* (Doctoral dissertation, Murdoch University).
- Sullivan, K., McConney, A., & Perry, L.B. (2018). A comparison of rural educational disadvantage in Australia, Canada, and New Zealand using OECD's PISA. *Sage Open*, 8(4), 2158244018805791.
- Timperley, H., & Alton-Lee, A. (2008). Reframing teacher professional learning: An alternative policy approach to strengthening valued outcomes for diverse learners. *Review of Research in Education*, 32, 328-269.
- van der Kolk, B. A. (2003). The neurobiology of childhood trauma and abuse. *Child Adolescent Psychiatric Clinics of North America*, 12, 293-317. DOI: [10.1016/S1056-4993\(09\)00003-8](https://doi.org/10.1016/S1056-4993(09)00003-8)
- Wolpow, R., Johnson, M., Hertel, R., & Kincaid, S. (2009). *The heart of learning and teaching: compassion, resiliency, and academic success*. Olympia: Washington State Office of Superintendent of Public Instruction Compassionate Schools.