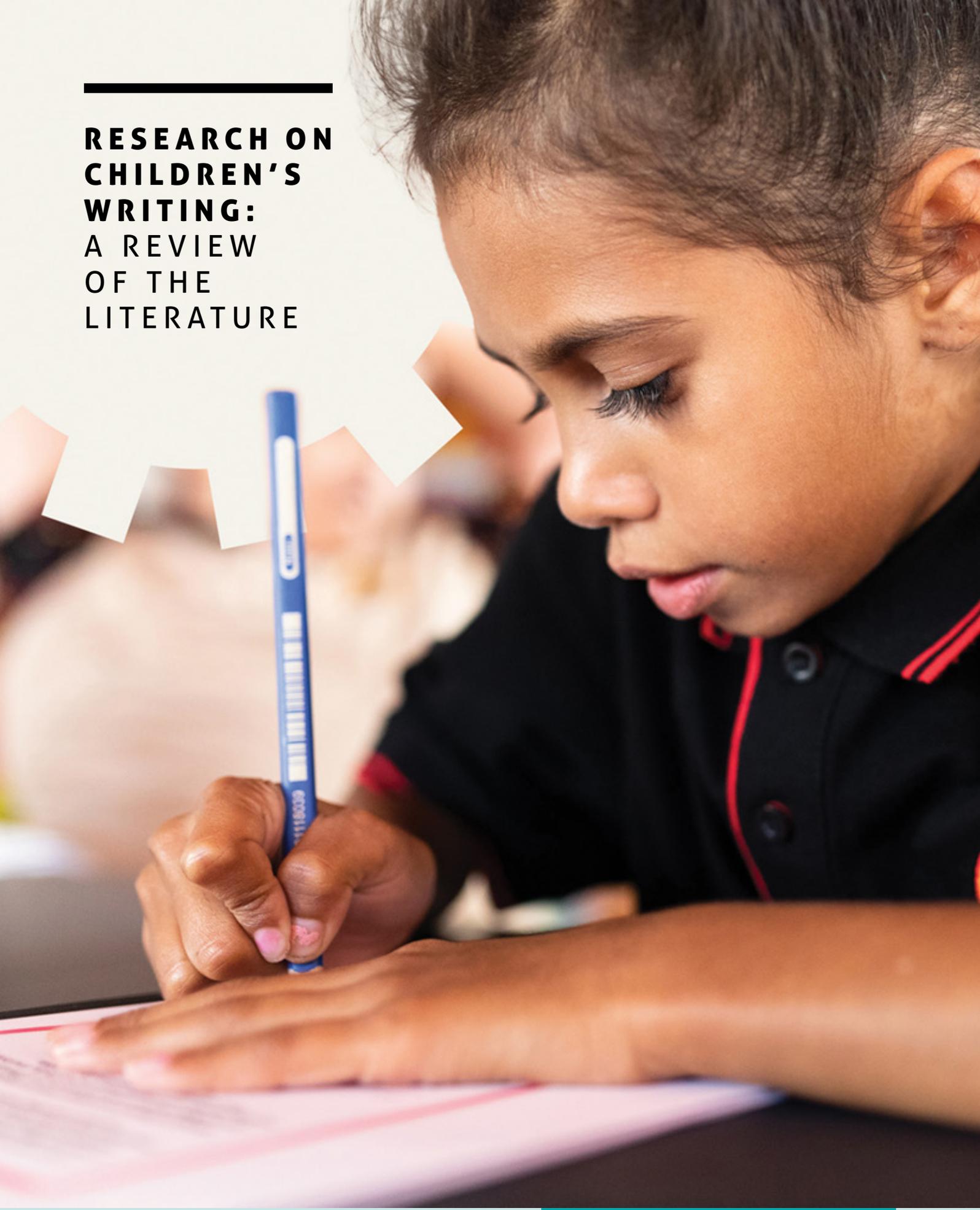


---

**RESEARCH ON  
CHILDREN'S  
WRITING:  
A REVIEW  
OF THE  
LITERATURE**



## **PROFESSOR TIFFANY JONES**

### **MACQUARIE UNIVERSITY SCHOOL OF EDUCATION**

Professor Tiffany Jones (BCA, BEd-Hons1, PhD) is an education sociologist with a background as a literature major and English and English Extension programs teacher in Australian secondary and K-12 schools. She has interdisciplinary student-centred sociology of education experience on projects for students who are Indigenous, from refugee and/or low ICSEA backgrounds. Professor Jones researches LGBTQ+, Indigenous and low socio-economic youth issues in education, education policy, health and social policy. Her projects have been supported by the ARC (DECRA, Linkage), UNESCO, beyondblue, governments and many other bodies. She has received various awards including the 2018 AARE Raewyn Connell Award for leadership in gender and sexuality education research; 2019 Vice-Chancellor's Learning and Teaching Student Nominated Award; and a 2020 Australian Awards for University Teaching Citation.



---

# CONTENTS

<b>INTRODUCTION</b>	<b>4</b>
<b>STORY FACTORY AND ITS CONTEXT</b>	<b>6</b>
<b>STORY FACTORY RATIONALE: THEORY OF CHANGE</b>	<b>9</b>
<b>STORY FACTORY AND NEW POLICY, CURRICULA AND PROFESSIONAL DEVELOPMENT REQUIREMENTS</b>	<b>13</b>
<b>STORY FACTORY AND LITERACY</b>	<b>24</b>
<b>STORY FACTORY AND CRITICAL AND CREATIVE THINKING</b>	<b>34</b>
<b>SUMMARY</b>	<b>42</b>
<b>REFERENCES</b>	<b>43</b>

---

# INTRODUCTION

This literature review examines the needs, policy and curricula alignments, theories, empirical peer-reviewed research studies and program feedback samples supporting the Story Factory's work. It looks specifically at four areas.

1. Research and theories aligning with the Theory of Change underpinning all Story Factory programs;
2. Alignment between Story Factory programs and national and NSW education policy and curricular goals;
3. Alignment between Story Factory programs and research and theories on literacy;
4. Alignment between Story Factory programs and research and theories on how to develop critical and creative thinking skills.

The document draws on key literature reviewed across library database searches, collating and organising selected items towards an appraisal of theories and evidence around the development of students' literacy and critical and creative thinking capabilities. It directly explores the linking of Story Factory's programs to policy and curricula, and the needs of students and teachers in a contemporary context of significant challenges to educational provision and services.

Story Factory aims to contribute to an Australia where all young people have the skills and confidence to tell their stories. In a context of declining student outcomes in the development of literacy and critical and creative thinking capabilities, Story Factory foregrounds opportunities to develop and expand these capabilities with an especial focus on writing. Story Factory justifies program approaches based on theoretical and empirical academic literature on literacy and literacy education, and aims to help students expand their skills and reap countless benefits as literate young people and future adults.

Story Factory programs are driven by a unique Theory of Change developed over the past decade by team members. This model aligns with a great deal of theory and empirical work on methods for improving literacy and critical and creative capabilities - including the use of scaffolded, staged processes supporting storytelling and self-efficacy outcomes. The Theory of Change and the approaches taken by Story Factory align with a range of education policy and curricula aims.

Story Factory programs aim to support:

- Literacy and critical and creative thinking-based policy and curricula goals;
- Teachers' professional learning in literacy and creativity;
- broader student socio-cultural safety and educational engagement, particularly for students who are Indigenous and/or speak English as an Additional Language or Dialect (EaLD).

Story Factory has a background in successfully engaging with and improving outcomes for a diverse range of students. Particular strengths include work with cohorts of EaLD and Indigenous students and young people experiencing disadvantage. Where young people may have a history of lower school engagement and lower writing achievement, evaluations confirm that Story Factory programs have improved engagement and writing outcomes.

Story Factory approaches are aligned with key literacy and literacy education theories, as well as criticality, creativity and creativity education theories. These include for example Expectancy-Value Theory, Socio-cultural Literacy Education Theory, Functional and Critical Literacies, Process-based Creativity Models and more. These theories support Story Factory's approach to literacy, which focusses on

enhancing the autonomous motivation of students and supporting students to complete activities that have inherent value - that is, are fun and culturally appropriate. These activities are associated not only with increased educational outcomes for students, but also increased relational outcomes in terms of engagement with staff and students in their schools. Further, there were also associations with wellbeing outcomes for students in empirical research, including increased confidence and lowered self-harm.

*Story Factory approaches are aligned with key literacy and literacy education theories, as well as criticality, creativity and creativity education theories.*

Data from evaluations, recommendations, and academic analyses strongly affirmed the value of Story Factory workshops for a range of stakeholders. Key feedback from academics, parents and students showed that focused and active engagement in Story Factory workshops appeared to have resulted, for the very large majority of students, in:

- increased motivation to write;
- increased self-confidence in literacy and in engaging with both adults and peers;
- increased knowledge and understanding of creative writing processes and their own writing practices; and
- the development of their writing skills sometimes even beyond the expected outcomes for their age/stage.

This growth and these positive results are experienced from initial and singular engagements. Further, these outcomes can be maximised when the workshops are continuous over time periods such as entire terms.



IMAGE JACQUIE MANNING

A young woman with long dark hair, wearing a dark blue school uniform with a white collar, is laughing heartily in a classroom. She is leaning forward, and her eyes are closed in a joyful expression. In the foreground, another student's hand is visible, holding a pen over an open book. A smartphone is also on the desk. The background shows other students at desks, slightly out of focus.

# STORY FACTORY AND ITS CONTEXT

IMAGE JACQUIE MANNING

## DECLINE IN GENERAL CAPABILITIES

Over 4 million secondary students are enrolled in Australian schools; 65.6% in government schools, 19.4% in Catholic Schools and 15% in other Independent schools (Australian Bureau of Statistics, 2020). Every three years the Programme for International Student Assessment (PISA), created by the Organisation for Economic Co-operation and Development (OECD), is sat by a representative sample of 15 year old students internationally including from Australia, comparing how countries' education systems are tracking towards informing education program reform across around 80 countries (Crato, 2021). These data influence the Australian Curriculum Assessment and Reporting Authority (ACARA) and the Australian Institute for Teaching and School Leadership (AITSL) in the development of Australia's national curricula and teaching standards (Crato, 2021). Currently the Australian Curriculum includes general capabilities where students develop the domains, as tested by PISA, in literacy, and critical and creative thinking. Considered core 21st Century skills (Utami, 2018), these are intended to be developed across each subject's syllabus and are highlighted for assessment and reporting at the discretion of each state or territory (ACARA, n.d.). Currently ACARA maps and displays these capabilities in a continuum, with clearly articulated documentation outlining what is required of students at each level.

*It is now more than ever also essential to ensure that time is given to the development of engaging literacy and other capabilities in ways that enliven students' passions for reading and story-telling, and the critical and creative thinking capabilities crucial to the developing workforce.*

However, since 2000, Australian students' results have declined in these domains. The nation is performing well below 10 other countries in reading (Australian Council for Educational Research, 2019; Seddon, 2001). Various factors are all cited as straining teachers' time to invest in their development needs and pedagogical design around these capabilities: high-stakes standards testing with the National Assessment Program - Literacy and Numeracy (NAPLAN) (Polesel, Rice, and Dulfer,

2014), an overcrowded curriculum (Yates, Collins, and O'Connor, 2011), and the fractured periodic nature of teaching practice across classrooms (Ritchhart, 2015). Further, it is important to note the likely impact of COVID-19 illness, injury and lockdowns in decreasing education time and efficiency in Australia and other countries where lockdowns were widespread (Mitchell et al., 2021; OECD, 2020; UNESCO, 2021). Time off direct schooling, including for illness and injury, has associations with lowered NAPLAN results in reading, grammar and writing; and lowered high school completions by years 10-12 (Mitchell et al., 2021). Dealing with all of these, and other, factors can combine to create high-need environments and gaps in PISA and NAPLAN achievement between students who are Indigenous and non-Indigenous, and from advantaged and disadvantaged backgrounds in terms of wealth and resource access (Mitchell et al., 2021; OECD, 2020; UNESCO, 2021). This complex context can leave little room to ensure teachers can learn the skills necessary for new and appropriate creative design in response to new policy, curricula and professional development requirements around writing (ACARA (ACARA, 2021a, 2021b, 2021c, 2021d, 2021e; NSW Education Standards Authority, 2021a, 2021b; NSW Government, 2020). It is now more than ever also essential to ensure that time is given to the development of engaging literacy and other capabilities in ways that enliven students' passions for reading and story-telling, and the critical and creative thinking capabilities crucial to the developing workforce. (Halpern, 2013)



IMAGE JACQUEE MANNING

## WHAT IS STORY FACTORY?

Story Factory is a not-for-profit creative writing centre for young people aged 7 – 17 years from under-resourced communities, founded in 2012. Story Factory's offerings include running writing workshops in schools in Sydney, Western Sydney and regional NSW working with kids to create their own books, poetry, and creative outputs. Story Factory's work is:

- Influenced by a range of educational theories;
- Informed by research-based literature on best and recommended practices;
- Aimed at promoting teachers' and students' capabilities around education in literacy, and critical and creative thinking capabilities promoted across the Australian National Curricula and the NSW curriculum/syllabus curricula; and
- Highly recommended and lauded by an extended community of experts, parents/guardians and students who have directly benefited from it across a decade of Story Factory's work in, with and for educational communities.

## WHAT ARE STORY FACTORY'S AIMS?

Story Factory staff aim to contribute to an Australia where all young people have the skills and confidence to tell their stories. Story Factory offers in-school program opportunities for both teachers and students to be supported in education on literacy, critical and creative thinking, and the inclusion of a range of communities towards the enhancement of connection. These opportunities are made available whilst teachers and students are operating within their regular classrooms and can also be offered in ways that allow teachers opportunities to observe, contribute and enrich their teaching practice. Story Factory thus aims to be a champion for the cultivation of creativity and the importance of writing to enrich the lives of young people in under-resourced communities through creative writing and story-telling; further empowering educators towards this mission.

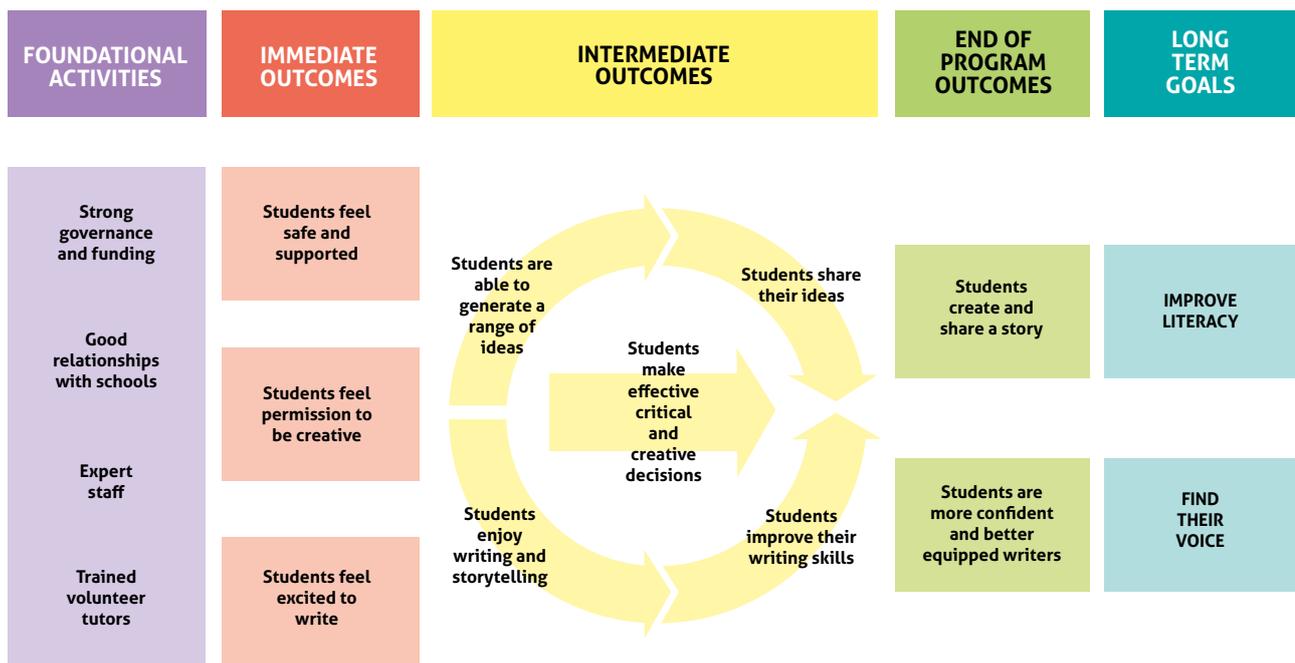
Accordingly, Story Factory programs offer responsive and timely interventions for students and teachers in literacy, critical and creative thinking capabilities. The need for such interventions is seen in international and national evidence on strong declines for Australian students in these areas; particularly data on the gap in outcomes for students from disadvantaged, CALD and Indigenous cohorts the Story Factory especially serves. This need is also seen in new teaching, policy and curricula standards; which Story Factory can aid schools in tackling.



# STORY FACTORY RATIONALE: THEORY OF CHANGE

THE rationale behind Story Factory has been developed across and informed by the work of its team for over a decade in the field with children and young people, as well as educators, on writing education. Story Factory's Theory of Change encompasses the team's theorisation of the benefits which underscore and inform the goals of the organisation's array of programs, particularly articulating how the research-supported methodologies and methods benefit students. The model emphasises the important motivations and advantages which the organisation aims to foreground and ensure, for enhancing students' literacy, creativity, and critical thinking outcomes.

# THEORY *of* CHANGE



All our workshops aim to improve young people's literacy and help them find their voice.

The way we do this is by establishing a space where young people feel safe and supported (volunteers are crucial to this), where they have permission to be creative, and where students are excited to write.

We then work on two main pathways in the workshops: we build students' enjoyment of writing and storytelling and their skills in this area; and we help them to generate a range of unique ideas and share them. These pathways then support them to make effective critical and creative decisions, which leads to the students creating and sharing a piece of writing. This is often the best piece of writing they've ever done.

## CONCEPTS INFORMING THE THEORY OF CHANGE

Story Factory draws on a range of literacy and creative and critical thinking education theoretical concepts in the Theory of Change. The theory incorporates and simplifies the core contributions of:

- **Expectancy-Value Theory;** presuming that students' belief in themselves as having the potential for literacy capabilities improves their literacy outcomes – and therefore teaching is best conducted in environments that are safe, supportive, permissive and exciting for students (Eccles, 2005; Eccles and Wigfield, 2002; Wasser, 2021).
- **Socio-cultural Literacy Education Theory;** understanding literacy as socio-culturally moored, specific to historic, geographic, and socio-cultural contexts – and therefore best developed in ways reflecting, involving and responding to social settings and backgrounds that matter to students (Barton, 2001; Bayat, 2016; Genlott and Grönlund, 2013; Street, 1984; Yarrow and Topping, 2001).
- **Functional Literacies;** framing literacy as involving (1) mechanical skills, (2) text generation and (3) executive functions – combining elements of Halliday's functional model of language (Halliday, 1975) as involving layers which communicate social and contextual meanings and intentions; and the 'Simple View of Writing' (Berninger and Amtmann, 2003) suggesting development of higher and lower level composition and executive functioning to reduce the cognitive load in writing.
- **Critical Literacies;** framing literacy as involving complex critical and creative thinking capabilities – and thus best taught in ways developing components such as critical and metacognitive thinking, planning and analyses; affective, personal and social skills and processes; transcription skills; self-regulation skills; writing knowledge and writing strategies (De Smedt, Van Keer, and Merchie, 2016; Graham, Gillespie, and McKeown, 2013; Graham, McKeown, Kihara, and Harris, 2012; Hidi and Boscolo, 2006; Luke and Peter, 1997).

## THE THEORY OF CHANGE

Story Factory's Theory of Change emphasises three outcomes that children and young people are motivated and advantaged by in enhancing literacy, creativity and other critical capabilities:

- 1. Immediate outcomes:** These consider the feelings of students engaging in Story Factory programs and their expectancy-value for their literacy capabilities. This occurs in relation to enhancing the immediate sense of safety and belonging to the writing setting, enhancing immediate writing community relations and socio-cultural motivations around writing. The programs aim to do this work both from the initial moments of engagement or first session components, and also in an ongoing manner in terms of building students' self-efficacy and confidence in themselves and confidence in connection to the educational context over time (Barton, 2001; Bayat, 2016; Clear Horizons, 2019; Eccles, 2005; Eccles and Wigfield, 2002; Genlott and Grönlund, 2013; Hughston, 2015; Street, 1984; Wasser, 2021; Yarrow and Topping, 2001). The methods and measures used to ensure and test that students feel safe, permitted to be creative and excited to write were selected for being age-appropriate; simple and meaningful; and engaging whilst offering minimal participant burden (Clear Horizons, 2019).
- 2. Intermediate outcomes:** These consider the actions of students engaging in Story Factory programs, in relation to their thinking and analytical processes and socio-cultural activities around writing. The programs aim to ensure students' skill-sets are built up progressively in idea generation and sharing, critical and creative decision-making, and developing and enjoying writing and storytelling. Programs also aim at ensuring that early successes are experienced by students across the shorter term, in a range of smaller idea and writing development stages. This ensures that sharing of ideas and story generation processes become a fun, affirming and accessible staged learning experience (De Smedt et al., 2016; Graham et al., 2013; Graham et al., 2012; Hidi and Boscolo, 2006; Kim, 2006; Luke and Peter, 1997; Millar and Dahl, 2011).

**3. End of program outcomes:** These relate to the concrete and perceptual experiences of students around their writing in social settings (Barton, 2001; Bayat, 2016; Genlott and Grönlund, 2013; Street, 1984; Yarrow and Topping, 2001), both towards the end of the program and for building expectancy-value longer term (Clear Horizons, 2019; Eccles, 2005; Eccles and Wigfield, 2002; Wasser, 2021). One end-of-program outcome in which students create and share a story, is a clear goal set and measured broadly in literacy education and evaluation seen in schools, most commonly using a rubric and/or creative writing criteria from the established curricula (Jasmine and Weiner, 2007). A second end-of-program outcome highlighted in Story Factory's Theory of Change is that students become more confident and better equipped writers. This is a core outcome measured in writing confidence/ self-efficacy evaluations work (Graham and Harris, 1989; Pajares and Johnson, 1994); one of the approaches used in Story Factory programs for measuring this outcome is 'confidence snails' – pictograms of snails gradually emerging from a shell to indicate different levels of self-confidence or assertiveness (Hughston, 2015).

*Programs also aim at ensuring that early successes are experienced by students across the shorter term, in a range of smaller idea and writing development stages.*

Overall, the ideas behind Story Factory, including the Theory of Change followed by team members, are linked to important concepts, methods and measures supported by literature on a range of broader theories. Approaches ensuring immediate, intermediate and end-of-program outcomes and benefits to students have been drawn from the team's combined pragmatic experience and wide reading on the best approaches for literacy and critical and creative capabilities development in students.



# STORY FACTORY AND NEW POLICY, CURRICULA AND PROFESSIONAL DEVELOPMENT REQUIREMENTS

**THE Australian Curriculum Assessment and Reporting Authority (ACARA) includes general literacy (reading, writing and spelling) and critical and creative thinking capabilities in the Australian Curriculum, measured by the Programme for International Student Assessment (PISA) and National Assessment Program – Literacy and Numeracy (NAPLAN) (ACARA, 2021e). Support is most needed for teachers in developing skills necessary for new and appropriate creative design and to ensure that time is given to the development of engaging literacy capabilities in ways that enliven students' passions for reading and story-telling (Halpern, 2013). Whilst United Nations data shows that countries in Oceania benefitted from relatively lower levels of disruptions to schooling in 2020 due to the COVID-19 pandemic, nonetheless findings suggest delays in development of literacy and related capabilities from 2020-2021+ should be projected for and programs of intervention planned (UNESCO, 2021, p. 24). These figures will be compounded by subsequent years of the pandemic's impacts. Furthermore, these data predict a shock to institutional development for teachers in literacy capabilities, and push for taking teacher training support directly into schools to mediate the problem (UNESCO, 2021, p. 5). Story Factory foregrounds opportunities to develop and expand student and staff capabilities in literacy and critical and creative thinking in this new international context of increased need, and the new local context of shifting Australian and NSW Government policy and curricula goals.**

### **SUPPORTING TEACHERS' LITERACY PROFESSIONAL DEVELOPMENT GOALS**

A key benefit to Story Factory's offerings that educators will immediately grasp is how they support teachers to have literate students. Students in more disadvantaged contexts have been especially impacted by the pandemic around literacy development, as a consequence of the digital divide or difficulties around illness for example (UNESCO, 2021). Partnering with Story Factory can enable literacy teachers direct opportunities for professional development through engagement in and promotion of pedagogical approaches to literacy education which are innovative and exciting – indeed, high teacher involvement is seen as an important success measure for the programs. The standards for educators in Australia encourage such collaborative approaches to development for both staff and student needs (NSW Education Standards Authority, 2021a).

There can be a lack of education for teachers of literacy on motivation and motivation-enhancing pedagogies and strategies (Karimi and Zade, 2019; Papi and Abdollahzadeh, 2012). Research studies from the Asia-Pacific and Europe on language and writing learning, as well as learner motivation studies from these regions, have repeatedly shown that quality literacy teachers should be defined as quality motivators (Jeon, 2021; Karimi and Zade, 2019; Littlejohn, 2008; Maeng and Lee, 2015; Malone and Lepper, 1987; Moskovsky, Arabai, Paolini, and Ratcheva, 2013; Oxford, 2001; Richter and Herrera, 2017). Research has also shown that excellent literacy teachers particularly were observed to often utilise strategies in classrooms to gain students' attention (Huett, Kalinowski, Moller, and Huett, 2008; Jeon, 2021; Keller, 2010; Lamb, 2017). Top literacy teachers around the world also used a range of different pedagogical efforts to create relevance to the students' interests and lives, enhance students' confidence, and enhance students' satisfaction with

components of literacy and writing (Jeon, 2021; Joe, 2014; Keller, 2010; Kurt and Keçik, 2017; Papi and Abdollahzadeh, 2012; Richter and Herrera, 2017). Direct lessons on composition improved students' writing, but teachers often lacked composition-focused pedagogical strategies (Bingham, Quinn, and Gerde, 2017; De Smedt, Van Keer, and Merchie, 2016), including the confidence in their abilities to know where to access culturally appropriate resources. Direct professional development can assist with these issues.

Teacher professional development interventions in the areas of language and literacy have identified positive effects for children's language and literacy outcomes through enhancements in teachers' literacy practices (Dickinson and McCabe, 2001; Landry, Anthony, Swank, and Monseque-Bailey, 2009; Powell, Diamond, Burchinal, and Koehler, 2010; Wasik and Hindman, 2011). Teachers' enhanced self-efficacy around teaching writing improved their use of composition and motivation strategies, positively correlated to student writing achievement for general student populations, and also for students from deaf and hard of hearing populations for example and other groups with particular needs (De Smedt et al., 2016; Graham, Wolbers, Dostal, and Holcomb, 2021). Story Factory uses a range of strategies to motivate both teachers and their students to become excited about and give their attention to the components of storytelling, including fun games, the prospect of publication and other approaches. Story Factory professional learning uses strategies geared at enhancing the relevance of everyday literacy and writing, to connect to students' passions and to build their confidence in the different steps of composition work. Indigenous learning pathways for example are an important core focus, including cultural consultations and oversight of lesson plans.

*Partnering with Story Factory can enable literacy teachers direct opportunities for professional development through engagement in and promotion of pedagogical approaches to literacy education which are innovative and exciting.*

## MEETING LITERACY EDUCATION POLICIES AND CURRICULA GOALS

Story Factory's offerings are directly linked in concrete ways to literacy-related education policies and standards for staff (NSW Education Standards Authority, 2021a, 2021b), and include direct professional learning programs and opportunities. They also link to curricula goals for students to build solid foundations in the oral, reading and writing literacy basics and text composition (NSW Government, 2020).

*Story Factory's offerings are directly linked in concrete ways to literacy-related education policies and standards for staff.*

### STUDENTS' LITERACY CAPABILITIES ACHIEVEMENT:

- **ACARA Literacy Capability Learning Continuum Sub-Element: Composing texts through speaking, writing and creating element.** Whilst many aspects of this sub-element are covered, Story Factory programs offer special opportunities to focus on:
  - Levels 1a-1d 'Compose texts' (ACARA, 2021d, p. 2).
  - Levels 1e-6/ Foundation-yr10 'Compose spoken, written, visual and multimodal learning area texts' (ACARA, 2021d, p. 3).
  - Levels 1e-6/ Foundation-yr10 'Use knowledge of text structures' (ACARA, 2021d, p. 4).
  - Levels 1e-6/ Foundation-yr10 'Use knowledge of text cohesion' (ACARA, 2021d, p. 4).
- **NSW Government Response to NSW Curriculum Review Commitment for Schools: Increase the number of students who achieve NAPLAN results in the top two bands for literacy and numeracy.**
  - Achieve targets embedded from 2021 in schools' four-year Strategic Improvement Plans, to drive all students' growth and attainment (NSW Government, 2020, p. 24).
  - Recommendation 4.1: Build strong foundations for early years students by giving 'priority to providing every child with solid foundations in the basics, especially oral language development, early reading and writing skills' making it clear 'writing skills ...are top priorities in the early years of school, particularly for children who are less advanced in these areas, and that these take precedence over other aspects of learning' (NSW Government, 2020, p. 17).

## TEACHERS' PROFESSIONAL DEVELOPMENT ON LITERACY:

### ■ NSW Government Response to NSW Curriculum Review Commitment for Schools: Provide Support for Teachers.

- Schools should ensure cohesive whole systems by giving teachers the professional developments they need 'to make sure they can implement the new curriculum' (NSW Government, 2020, p. 6).
- Recommendation 10.2: Invest in professional capacity building to support the implementation of the new curriculum by developing and delivering 'professional learning to build teachers' skills in assessing and diagnosing student learning and their knowledge of effective, evidence-based teaching strategies' (NSW Government, 2020, p. 14).

### ■ NESA Teaching Standard 2: Know the content and how to teach it.

*Focus:* Literacy and numeracy strategies.

*2.5.2 Standard Descriptor:* Apply knowledge and understanding of effective teaching strategies to support students' literacy and numeracy achievement:

- Plans literacy sessions which provide opportunities for students to talk, listen, read and write; ensures students read both factual and fiction texts.
- Uses a range of activities to support literacy; ensures students have sufficient time for talking and listening; implements a variety of types of instruction; uses modelling and small group instruction.
- Uses a range of activities to support student numeracy; ensures students see connections between content and numeracy skills to support learning, such as through the use of graphs and tables, statistics, symbols, analytical processes.
- Ensures literacy and numeracy instruction is explicit and structured; flexibly sequences lessons according to students' learning needs; organises students into small groups according to their literacy or numeracy needs; teaches literacy and numeracy skills and strategies during frequent modelled and guided lessons; plans for students to have regular opportunities for independent reading and writing.
- Assesses student literacy and numeracy needs in order to determine content and activities; utilises and builds upon students' prior knowledge; encourages students to discuss topics (in their first language if appropriate).
- Understands students' literacy and numeracy needs in subject/KLA; groups students according to their literacy or numeracy needs; undertakes appropriate student assessments; ensures students utilise their literacy and numeracy knowledge and skills to articulate their understanding of content or to explain a skill they have learned.

- Explicitly facilitates transfer of literacy and numeracy learning across subjects/KLAs so that students make connections.
- Uses support personnel effectively; where appropriate seeks out advice or follows recommendations of support personnel (NSW Education Standards Authority, 2021b, p. 13).

### ■ NESA Teaching Standard 6: Engage in professional learning.

*Focus:* Apply professional learning and improve student learning.

*6.4.2 Standard Descriptor:* Undertake professional learning programs designed to address identified student learning needs:

- Seeks professional development courses 'designed to address identified student learning needs, such as literacy...' (NSW Education Standards Authority, 2021b, p. 35).

## STUDENTS' AND TEACHERS' INTERCULTURAL CAPABILITIES WITHIN LITERACY:

### ■ ACARA Intercultural Understanding Capability Learning Continuum Sub-Element: Recognising culture and developing respect element.

Whilst many aspects of this sub-element are covered, Story Factory programs offer special opportunities to focus on:

- Levels 1e-6/ Foundation-yr10 'Explore and compare cultural knowledge, beliefs and practices' and especially Level 3/ By end of yr4 'describe and compare a range of cultural stories, events and artefacts' (ACARA, 2021c, p. 1).
- Levels 1e-6/ Foundation-yr10 'Develop respect for cultural diversity' and especially Level 3/ By end of yr4 'identify and discuss the significance of a range of cultural events, artefacts or stories recognised in the school, community or nation' (ACARA, 2021c, p. 1).

### ■ NSW Government Response to NSW Curriculum Review Commitment for Schools: Increase the proportion of Aboriginal students attaining the HSC while maintaining their sense of cultural identity.

- Achieve targets embedded from 2021 in schools' four-year Strategic Improvement Plans, to drive all students' growth and attainment (NSW Government, 2020, p. 24).
- Recommendation 5.3: Build strong foundations for middle years students by developing 'a curriculum that specifies what every student should know and understand about Aboriginal cultures and histories, and incorporate this into Human Society and its Environment' (NSW Government, 2020, p. 14).

■ **NESA Teaching Standard 2: Know the content and how to teach it.**

*Focus:* Understand and respect Aboriginal and Torres Strait Islander people to promote reconciliation between Indigenous and non-Indigenous Australians.

*2.4.2 Standard Descriptor:* Provide opportunities for students to develop understanding of and respect for Aboriginal and Torres Strait Islander histories, cultures and languages:

- Ensures students 'develop an understanding of Aboriginal and Torres Strait Islander languages through reference to a range of examples, such as texts, literacy activities, films, presentations, performances, case studies, artworks, images' (NSW Education Standards Authority, 2021b, p. 12).

■ **NESA Teaching Standard 1: Know students and how they learn.**

*Focus:* Strategies for teaching Aboriginal and Torres Strait Islander students.

*1.4.2 Standard Descriptor:* Design and implement effective teaching strategies that are responsive to the local community and cultural setting, linguistic background and histories of Aboriginal and Torres Strait Islander students:

- Understands cultural sensitivities and ensures students are given the opportunity to 'respond in culturally appropriate ways; avoids overemphasis on a particular perspective' in use of storytelling (NSW Education Standards Authority, 2021b, p. 6).



**STUDENTS' AND TEACHERS' ICT CAPABILITIES WITHIN DIGITAL LITERACY:**

■ **ACARA Information and Communication**

**Technology Capability Learning Continuum Sub-Element: Creating with ICT element.**

Whilst many aspects of this sub-element are covered, Story Factory programs offer special opportunities to focus on:

- Levels 1-6 'Generate ideas, plans and processes' – using ICTs in planning creative outputs (ACARA, 2021b, p. 2).
- Levels 1-6 'Generate solutions to challenges and learning area tasks' – using ICTs for composing creative outputs or publications (ACARA, 2021b, p. 2).

■ **NSW Government Schools Digital Strategy:**

**Learning from visiting experts – Incursions.** Visiting educators (via incursions) can lead practical learning experiences for audiences large and small, enabling students to engage with new skills from experts and teachers help them visualise abstract concepts and apply the knowledge in practical ways via digital technologies for compositions (NSW Government, 2021).

■ **NSW Government Response to NSW Curriculum Review Commitment for Schools: Skills in applying knowledge.**

- Recommendation 2.1: Make explicit in new syllabuses for every subject that skills in applying knowledge are part of the intended learning, and show how these skills are to be developed over time. These skills include skills in 'using technologies...' (NSW Government, 2020, p. 16).

■ **NSW Government Response to NSW Curriculum Review Commitment for Schools: Implementing the Schools Digital Strategy.**

- Improve equity, professional development, and access to digital tools and technologies 'to empower both teaching and learning, as well as to support the digital literacy of students, teachers and organisational staff' (NSW Government, 2020, p. 26).
- Recommendation 10.2: Invest in professional capacity building to support the implementation of the new curriculum by developing and delivering 'professional learning to build teachers' skills in assessing and diagnosing student learning and their knowledge of effective, evidence-based teaching strategies' (NSW Government, 2020, p. 14).

## ■ NESAs Teaching Standard 2: Know the content and how to teach it.

*Focus:* Information and Communication Technology (ICT).

*2.6.2 Standard Descriptor:* Use effective teaching strategies to integrate ICT into learning and teaching programs to make selected content relevant and meaningful, including for example:

- Uses ICTs effectively to respond to interests of students; ensures ICT resources are relevant and meaningful to students' learning needs and interests; promotes student-centred learning and self-directed work;
- Maintains a discerning learning focus in the use of ICT; integrates ICT into lesson content so that it is a tool and not an end in itself; incorporates appropriate software into teaching and learning programs; is explicit in use of terminology.
- Improves own use of ICT; supports high order use of ICT; recognises the relevance of ICT to teaching and learning;
- Supports appropriate and relevant use of ICT. For example... ensures curriculum integration;
- Supports the integration of ICT into teaching and learning programs (NSW Education Standards Authority, 2021b, p. 14).

## ■ NESAs Teaching Standard 6: Engage in professional learning.

*Focus:* Apply professional learning and improve student learning.

*6.4.2 Standard Descriptor:* Undertake professional learning programs designed to address identified student learning needs:

- Seeks 'professional development courses designed to address (...) use of ICTs' (NSW Education Standards Authority, 2021b, p. 35).

## SUPPORTING TEACHERS' CREATIVITY IN OUTPUTS AND PROFESSIONAL DEVELOPMENT GOALS

Story Factory's offerings support teachers to have creative classrooms. There has been a dearth of attention historically to the quality of creative products in schools (Collard and Looney, 2014). This was in part due to the absence of widely shared vocabularies of creativity in school policy and curricula in the past (Cachia, Ferrari, Ala-Mutka, and Punie, 2010), and in part due to historic resistance from teachers and other creative professionals to approaches that reminded them of classic assessment of learner attainment – based on an over-privileging of the view that creativity was a gift rather than a capability which could be learned (Fryer, 1996; Lucas, Claxton, and Spencer, 2013). There have also been efforts by teachers to avoid discouraging self-expression through assessment or task-based learning of critical and creative thinking (Collard and Looney, 2014). European studies also show teachers may aim to develop critical and creative writing skills in students to:

1. facilitate students' personal growth and healing;
2. encourage the exploration of unknown topics;
3. help students sell their writing;
4. connect students with significant texts and well-established creative writing processes and practices;
5. foster students' critique and critical comment about the world through their writing; and
6. cultivate students' more profound learnings (Gilbert, 2021).

### *Story Factory's offerings support teachers to have creative classrooms.*

Teachers can sorely need assistance, training, or professional development towards reconnecting to creativity for teaching about creativity and teaching creatively (Collard and Looney, 2014; Lamont, Jeffes, and Lord, 2010; Wade-Leeuwen, 2016). In Australia, Europe and Asia guidance has been historically lacking on methods for teaching creative capacities to students in particular (Cachia et al., 2010; Collard and Looney, 2014; Craft, 2001; Hui and Lau, 2012; Nanyoung, 2021; Ryhammer and Brolin, 1999; Wade-Leeuwen,



IMAGE JACQUIE MANNING

2016). Partnerships between teachers and creative professionals are highlighted in teacher-focussed evaluative education and partnership research studies for offering provision of significant new opportunities for collaboration and teacher creativity development, as well as for supporting teachers in enhancing learner creativity directly and indirectly (Clark, 1999; Collard and Looney, 2014; Collinson, Fedoruk Cook, and Conley, 2006; Lamont et al., 2010; Parker, 2013; Wade-Leeuwen, 2016). Partnering with Story Factory can further potentially offer teachers a time of reprieve in the facilitation of learning. It can also potentially provide direct opportunities for professional development through live-action creativity education, good-practice live modelling and co-teaching collaboration on the ground.

## MEETING CREATIVITY EDUCATION POLICIES AND CURRICULA GOALS

Story Factory offerings are linked in concrete ways to creativity-related education policies (NSW Education Standards Authority, 2021a, 2021b), and curricula goals (ACARA, 2021a; NSW Government, 2020). The NSW Education Standards Authority's *Australian Professional Standards for Teachers* include standards Story Factory is well positioned to help teachers achieve for students' critical and creativity capabilities and literacy outcomes, including: '2. Know the content and how to teach it', '3. Plan for and implement effective teaching and learning' and '6. Engage in professional learning' (NSW Education Standards Authority, 2021a). These achievements can be worked towards at graduate, proficient, highly accomplished and lead teacher levels. Story Factory can for example:

- Assist *Graduate teachers* in all aspects of Standard 6 – identifying their professional development needs, seeking assistance, seeking constructive feedback, and understanding of the rationale for continued professional learning and the implications for improved student learning.
- Assist *Proficient teachers* in standard 3.3.2 for example to 'select and use relevant teaching strategies to develop knowledge, skills, problem-solving, and critical and creative thinking' (NSW Education Standards Authority, 2021a).
- Offer *Highly accomplished teachers* services to assist them in meeting standard 3.3.3: 'Support colleagues in selecting and applying effective teaching strategies to develop knowledge, skills, problem-solving, and critical and creative thinking' (NSW Education Standards Authority, 2021a).
- Offer *Lead teachers* ways to incorporate Story Factory opportunities within their program towards 3.3.4: 'Work with colleagues to review, modify and expand their repertoire of teaching strategies to enable students to use knowledge, skills, problem-solving, and critical and creative thinking'.

Direct rationale-based connections and actionable learning opportunities around creativity, creativity development, creativity education and outcomes for students include:

## STUDENTS' CRITICAL AND CREATIVE THINKING CAPABILITIES ACHIEVEMENT:

### ■ ACARA Critical and Creative Thinking Capability

**Learning Continuum Sub-Element: Generating ideas, possibilities and actions element.** Whilst many aspects of this sub-element are covered, Story Factory programs offer special opportunities to focus on:

- Levels 1-6/ Foundation-yr10 'Imagine possibilities and connect ideas' towards creative compositions (ACARA, 2021a, p. 1).
- Levels 1-6/ Foundation-yr10 'Consider alternatives' for creative compositions (ACARA, 2021a, p. 1).
- Levels 1-6/ Foundation-yr10 'Seek solutions and put ideas into action', making predictions about how outcomes of different solutions for and in creative compositions (ACARA, 2021a, p. 1).

### ■ NSW Government Response to NSW Curriculum Review Commitment for Schools: Skills in applying knowledge.

- Recommendation 2.1: Make explicit in new syllabuses for every subject that skills in applying knowledge are part of the intended learning, and show how these skills are to be developed over time. These skills include skills in 'critical and creative thinking, collaborating, and communicating' (NSW Government, 2020, p. 16).

## TEACHERS' PROFESSIONAL DEVELOPMENT ON CRITICAL AND CREATIVE THINKING:

### ■ NSW Government Response to NSW Curriculum Review Commitment for Schools: Provide Support for Teachers.

- Schools should ensure cohesive whole systems by giving teachers the professional development they need 'to make sure they can implement the new curriculum' (NSW Government, 2020, p. 6).
- Recommendation 10.2: Invest in professional capacity building to support the implementation of the new curriculum by developing and delivering 'professional learning to build teachers' skills in assessing and diagnosing student learning and their knowledge of effective, evidence-based teaching strategies' (NSW Government, 2020, p. 14).

### ■ NESAs Teaching Standard 3: Plan for and implement effective teaching and learning.

*Focus:* Use teaching strategies.

*3.3.2 Standard Descriptor:* Select and use relevant teaching strategies to develop knowledge, skills, problem solving and critical and creative thinking including for example:

- Responds to interests of students; ensures teaching strategies are relevant and meaningful to students' learning needs and interests; promotes student-centred learning and problem solving.
- Encourages critical and creative thinking through engaging students in higher order thinking and risk taking within the learning.
- Implements a range of teaching strategies to develop student knowledge and skills.
- Understands student difference in levels of cognition, knowledge, skills, experience and interest so that all students can demonstrate creative thinking through generating and applying new ideas in specific contexts.
- Utilises teaching strategies that are appropriate for age, individual, group, stage and the ethos of the school/ system/sector to effectively encourage critical and creative thinking.
- Plans variety in teaching strategies; develops students' skills in critical and creative thinking (NSW Education Standards Authority, 2021b, p. 17).

### ■ NESAs Teaching Standard 6: Engage in professional learning.

*Focus:* Apply professional learning and improve student learning.

*6.4.2 Standard Descriptor:* Undertake professional learning programs designed to address identified student learning needs:

- Seeks professional development courses 'designed to address identified student learning needs, such as (...) critical and creative thinking...' (NSW Education Standards Authority, 2021b, p. 35).

## ACADEMIC, PARENT AND STUDENT REVIEWS OF STORY FACTORY PROGRAM POLICY, CURRICULA AND PROFESSIONAL DEVELOPMENT OUTCOMES

Academic, parent and student responses provided data and analyses strongly affirming the value of Story Factory workshops for policy, curricula and professional development outcomes. This included for different student types by gender, age and year level for example; and for a range of different benefits over time.

*Academic, parent and student responses provided data and analyses strongly affirming the value of Story Factory workshops for policy, curricula and professional development outcomes.*

Evaluations of Story Factory overseen by Sydney University academics drew on analyses of the questionnaire data, those stemming from the observational records and case studies which allowed for considerations of intercultural capabilities for teachers and students tied to policy and curricula goals (Ewing, 2015; Smith and Manuel, 2017). Academics particularly noted that the ongoing and yet constantly evolving nature of Story Factory work in staged workshop engagements was helpful for the intercultural development of teachers and for culturally and linguistically diverse youth, especially in encouraging these youth to experience pride in their commitment to story work. For example, Professor Emerita Robyn Ewing of Sydney University described how a series of sessions at the National Centre for Indigenous Excellence built up students' and staff members' commitment to and pride in their literacy work through a range of interesting and relational approaches:

“

**There was a real buzz in the room, a sense of engagement especially amongst the 'core' group, the regulars. A. commented with pride to the newcomers: 'I've been every week.' D. takes my hand and says, 'Can I write with you?' And thus I began to move from observer to participant tutor. While scribing for D. who has created an 'alien' pet I looked around the room observing: K. (tutor) is reading E.'s story while E. illustrates. E. has taken over the writing of her story after orally dictating the first part – she shares with the group around her that she has been dreaming about her story and writes with confidence today. Lo. (tutor) has brought in a small stuffed Tasmanian Devil she found at home to serve as a model for T's description. T. is hard at work on his story. L.(student) writes about her lorikeet being bullied but is less confident about drawing. Her tutor makes a start to a sketch and L. encouraged joins in with her. P.(tutor) has been asked to draw for Tyr and Tyr then uses this a model for his own sketch of his animal. I found it interesting to see the use of drawing as a way into writing for some of the children (Ewing, 2015, p. 5).**

Phone, email and face-to-face interviews undertaken with parents/guardians of Story Factory workshop participants showed they were extremely positive about the impact on their child/children (Smith and Manuel, 2017). Many parents had observed the children's increased sense of safety in social, cultural and educational environments in ways that link to policy and curricula goals. Parents especially reflected on how this improved their relations at school and experiences of schooling. See examples below.

“

**The Mother of son S. (eighth-grader/teen) who had attended Story Factory workshops for four years, said she had had several comments from teachers at school about her son 'being able to talk to people now'. She believes that this is due to S. meeting a variety of people at the workshops and becoming more versatile in the range of people he can mix with, which 'kills the stereotype' about people of different resource backgrounds and demographics. From her own experience with dyslexia, believes that people become disadvantaged through difficulties with literacy, and commented on the huge improvement that has occurred for her son's literacy engagement.**

“

**The parent of a son (8yrs+) who had attended Story Factory workshops since year 3, and was continuing these aged 11yrs, said:**

*SSF has been a real rock for him especially at times when school was not going so well. He feels comfortable at SSF and really valued by the staff who treat him as special with lots to contribute. He has had really high quality educators and skillful volunteers with a deep model of respect. At SSF there is a readiness to be adaptive to what children in this local area need.*



IMAGE JIM A BAKER

A variety of students have directly reported that they experienced deep and diverse value from Story Factory engagements. Smith and Manuel (2017, pp.3-8) found in their analysis of a small sample of 88 completed questionnaire evaluations of the program that:

- The overwhelming majority (83%) of students affirmed that 'I know I can ask for help and support' at Story Factory sessions.
- Eight in ten (80%) of students responded that they 'like coming' to Story Factory sessions.
- Most student participants responded that their participation in Story Factory sessions had 'helped their schoolwork' (65%).

“

**Bindi (12yrs+) - who was born in Indonesia and then came to Australia - was a key example of a student who had overall schooling benefits. She completed three workshops one year and a year-long novella course in a subsequent year. Observations showed she actively sought feedback to improve her writing during Story Factory sessions but was prepared to negotiate this to ensure that it fits with her goals and her writing voice. She consistently recorded that she liked and enjoyed being part of Story Factory sessions, where she has support to write creatively, and which also helped her at school.**



IMAGE JACQUE MANNING

*Many parents had observed the children's increased sense of safety in social, cultural and educational environments in ways that link to policy and curricula goals.*

Overall, a range of direct rationale-based policy and curricula connections can be made for Story Factory programs. Specifically, actionable learning opportunities towards supporting teachers' literacy professional development goals, meeting literacy education policy and curricula goals, supporting teacher's creativity in outputs and professional development goals, and critical and creative thinking policy and curricula goals can be seen. Further, connections for learning on Indigenous and cultural topics are evident. Evaluative data showed significant expert, guardian and student support for the links Story Factory workshops afford to policy, curricula and professional development goals.



# STORY FACTORY AND LITERACY

IMAGE JACQUIE MANNING

**THE Programme for International Student Assessment (PISA) uncovered data on Australian students' decline in literacy since 2000, and this has had a significant influence on the ACARA, AITSL and NESA leadership in consideration and mapping of student capability guidelines and teaching standards (ACARA, 2021; Crato, 2021). Literacy capabilities are core 21st Century skills (Utami, 2018), intended to be developed across each subject's syllabus and highlighted for assessment and reporting (ACARA, n.d.). ACARA maps and displays literacy capabilities in a continuum, outlining what is required of students at various levels for reading, writing, and spelling. Given the nation is performing well below 10 other countries in reading with little improvement in writing over time (ACARA, 2021; Australian Council for Educational Research, 2019; Seddon, 2001), and the pressures of NAPLAN literacy testing (Polesel, Rice, and Dulfer, 2014), teachers need support towards achieving these outcomes. Whilst students in all years have shown improvements in spelling, concerns still exist particularly in writing (ACARA, 2021). Story Factory foregrounds opportunities to develop and expand literacy capabilities with an especial focus on writing. Story Factory justifies these approaches based on theoretical and empirical academic literature on literacy and literacy education – towards positioning students to expand their skills and reap countless benefits as literate young people and future adults.**

### **APPLYING LITERACY AND LITERACY EDUCATION THEORIES**

One factor in the value of Story Factory's offerings is how they are linked in concrete ways to literacy and literacy education theories. Competing theoretical perspectives frame literacy and literacy education in research, and Story Factory draws on several—specifically:

- Expectancy-Value Theory;
- Socio-cultural Literacy Education Theory;
- Functional Literacy Theory; and
- Critical Literacies.

Early literacy framings had a cognitive, deterministic perspective and focussed on direct transmission of functional basics (Berge, 2004; Ong, 1982). Story Factory's work firstly aligns with more recent liberal cognitive perspectives which account for subjective individual differences in motivation towards literacy capabilities. Specifically, Story Factory's work builds on Expectancy-Value Theory (Eccles, 2005; Eccles and

Wigfield, 2002), which presumes that students' belief in themselves as having the potential for literacy capabilities improves their literacy outcomes. Teaching and regular practising of writing skills from an early age onwards helps students become self-aware of their voices, and their own constructions of narrative (Wasser, 2021). Combining the focus on individual and group expression in writing lessons, students can trace and reflect on their own self-belief transformations through their writing process (Wasser, 2021).

Secondly, Story Factory's work also aligns with Socio-cultural Literacy Education Theory – the contemporary framing of literacy as socio-culturally moored, specific to historic, geographic, and socio-cultural contexts (Barton, 2001; Genlott and Grönlund, 2013; Street, 1984). In a socio-cultural perspective, learning is both formal and informal, and includes a range of skills and knowledge artifacts which can be absorbed in practice in social settings – in fun practical and playful usage, not just in purely theoretical formal lessons (Bahlmann Bollinger and Myers, 2020; Säljö, 2002; Wood, 2014). This view encourages the teaching of literacy capabilities in ways

which meet students where 'they are' – taking interest in their everyday phonological learning around their discussion of their own personal and social experiences, creativity, and interests (Frederickson and Tony, 2002; Gerde, Bingham, and Pendergast, 2015; Liberg, 2006). It understands that the early support children receive during the preschool years at home varies greatly from family to family, and educational experiences can be used to uplift students' pre-existing exposures whilst also validating their different backgrounds (Aram, 2010; Aram and Biron, 2004; Bahlmann Bollinger and Myers, 2020). This perspective acknowledges and counters the gendered and ableist social narratives students may be exposed to about writing and humanities more broadly as necessarily being 'for'/representative of one gender or another, or as necessarily excluding language diversity (Bourke and Adams, 2011; Hsiao, Banerji, and Nation, 2021; Rice and Dunn, 2020; Tait, 2019; Wasser, 2021). It accepts that social and playful processes are useful, and sometimes essential, in enhancing students' reflection and skill development (Bahlmann Bollinger and Myers, 2020; Rice and Dunn, 2020; Wasser, 2021; Wood, 2014). Further, it responds to meta-analyses of literacy studies demonstrating the importance of teacher and peer verbal and written support to the quality of students' writing performance (Graham, Harris, and Santangelo, 2015; Graham, McKeown, Kiuvara, and Harris, 2012). This perspective values writing pedagogy that is co-constructed from students' and teachers' narratives, using their own diverse funds of knowledge and authentic experiences (Rice and Dunn, 2020; Wasser, 2021).

Thirdly, Story Factory programming draws on Functional Literacies in its model of literacy and educational approaches. Its model of literacy constructs literacy as involving:

1. mechanical skills,
2. text generation and
3. executive functions.

This is based on functional theorisations of literacy components which can be learned through staged 'literacy events' with assistance and guidance. Students are not 'thrown into the deep end' of story-telling, they are taught its parts through guidance in literacy events. These literacy events can range from small tasks of listening or reading a small text, physical writing practice or idea generation sessions right through to set staged

composition tasks for example. Functional literacy incorporates elements of Halliday's functional model of language (Halliday, 1975), which frames language as involving various layers which communicate social and contextual meanings and intentions in different ways. Halliday's model is combined in Story Factory's work with the 'Simple View of Writing' (Berninger and Amtmann, 2003). This view suggests the guided development of higher- and lower-level composition and executive functioning are a necessary focus for literacy work with young people, in order to reduce their cognitive load in writing. This developmental work is a core consideration in Story Factory programs and addressed both initially and cumulatively across Story Factory sessions.

### *Teaching and regular practising of writing skills from an early age onwards helps students become self-aware of their voices, and their own constructions of narrative*



IMAGE JACQUIE MANNING

### *It accepts that social and playful processes are useful, and sometimes essential, in enhancing students' reflection and skill development*

Finally, Story Factory's work employs Critical Literacies – considering literacy as including components of critical thinking, emphasised in its offerings. A critical view of literacy events emphasises that students need to learn not just the function but the daily real-world social aspects of speaking, writing, and interpretation in different communities. This includes then doing critical work towards:

- breaking the code of written, visual and spoken texts intended for different audiences;
- participating in understanding and composing meaningful written, visual and spoken texts for a particular social or cultural group;
- using texts functionally towards informal (not just formal) real-world everyday purposes and goals; and
- critically analysing and transforming texts (Luke and Peter, 1997).

### *Reading, writing, and speaking are thus seen as inherently personal and social activities to be learned in informal unstructured (fun) ways as well as formal structured ways.*

Students can learn to recognise that the same message can be communicated in different ways, by or for different people. Literacy capabilities therefore include not just engaging in, but reshaping, texts. They can also include critically examining how descriptions construct students' worlds. Reading, writing, and speaking are thus seen as inherently personal and social activities to be learned in informal unstructured (fun) ways as well as formal structured ways. Students' (meta)cognition and motivation are therefore considered essential to the complex nature of the writing process in Critical Literacies. This is because writers need to draw on cognitive, metacognitive, and affective processes (De Smedt, Van Keer, and Merchie, 2016; Hidi and Boscolo, 2006).



IMAGE JACQUEE MANNING

To write effectively, students need to master:

- a. writing knowledge (e.g. knowledge about text genres),
- b. transcription skills (e.g. spelling),
- c. self-regulation skills (e.g. monitoring one's progress, keeping a check list), and
- d. writing strategies (e.g. planning, text production, and text revision) (De Smedt et al., 2016; Graham, Gillespie, and McKeown, 2013).

New writers can be thrown by this complex interplay between writing knowledge, skills, and strategies. They may fail to plan for a particular audience and for composition strategies which can take them through all these steps and stages in story-telling work. Critical thinking and planning is thus seen as a key component in Story Factory programs that needs to be scaffolded, taught, and experienced in different ways.



## SUPPORTING STRATEGIC APPROACHES TO LITERACY

A second factor underscoring the value of Story Factory's offerings for literacy is the empirical data. A considerable amount of empirical research on children's reading skills has emerged in recent decades, though fewer studies have surfaced on writing skills and writing skills pedagogy. Research on students' development of creative writing skills mainly relies on classroom ethnographic observations and interventions and is mainly drawn from the US, Australia and Europe (Bahlmann Bollinger and Myers, 2020; Bingham, Quinn, and Gerde, 2017; De Smedt et al., 2016; Gerde et al., 2015; Gerde, Bingham, and Wasik, 2012). This research sits within a broader body of mixed qualitative and quantitative literacy literature including Asian and European studies on functional aspects of writing such as hand-writing/lettering and vocabulary learning (Cho and McBride, 2018; Cordeiro, Castro, and Limpo, 2018; Walgermo, Foldnes, Uppstad, and Solheim, 2018). US and European studies often showed low amounts of time were spent on writing instruction (20-30min in the US studies per day, up to 1hr in the European studies), and often creative writing instruction was subsumed within lessons largely focussed on functional language aspects.

The US and Australian studies on how teachers can support students' writing skills development showed the importance of multiple facets of learning environments including writing routines, prevalence of writing materials and environmental print and stimuli (Bahlmann Bollinger and Myers, 2020; Gerde et al., 2012; Puranik and Lonigan, 2011; Roskos, Christie, and Richgels, 2003). However these alone are insufficient (Diamond, Gerde, and Powell, 2008; Guo, Justice, Kaderavek, and McGinty, 2012). The US studies revealed that core to the development of students' writing skills are how teachers use these writing materials and the ways in which they pedagogically approach students' writing composition process attempts, through:

- encouragement and motivation strategies,
- modelling of composition, and
- individualised and whole group instruction methods including facilitated play and teacher-directed activity stations stimulating ideas or writing generation processes (Bingham et al., 2017; Gerde et al., 2015; Guo et al., 2012; Roskos et al., 2003; Roskos, Tabors, and Lenhart, 2009; Wasser, 2021; Williams, Larkin, Coyne-Umfreville, and Herbert, 2019).

*The students from classrooms with teachers who used strategies directly aimed at supporting composing, exhibited significantly stronger writing skills.*

A US observation-based study of 41 early childhood teachers and 488 students across three states found that the scope and focus of teachers' supportive strategies used for composition were limited – teachers more often focussed on handwriting and spelling skills (Bingham et al., 2017). The students from classrooms with teachers who used strategies directly aimed at supporting composing, exhibited significantly stronger writing skills. Another US study found that teachers' uses of writing modelling and writing process scaffolding for students during writing opportunities particularly predicted children's writing outcomes (Gerde et al., 2015). An Australian study focussed on young children showed the importance of play and other stimuli, as well as later follow-up processes of integrating and reflecting on learning (Bahlmann Bollinger and Myers, 2020).

European studies emphasised strategies enhancing students' individual engagements in writing processes. For example, a Flanders survey and test-based study of 128 teachers and 800 fifth- and sixth-grade students showed the value of pedagogies promoting students' self-efficacy in ideation (the forming of concepts and ideas) and students' high individual motivation for both the production of informational and narrative texts (De Smedt et al., 2016). Composition planning strategies are positively correlated with students' writing quantitative and qualitative performance and achievement at all ages (Cameron and Moshenko, 1996; De Smedt et al., 2016; Williams et al., 2019), alongside strategies enhancing students' motivation for writing (Graham, Berninger, and Fan, 2007; Troia, Harbaugh, Shankland, Wolbers, and Lawrence, 2013) and strategies enhancing students' self-efficacy for writing (Pajares and Valiante, 1997; Zimmerman and Bandura, 1994).

Finally, classroom writing practices have been shown to predict students' writing outcomes in various meta-analyses (Bangert-Drowns, Hurley, and Wilkinson, 2004; Graham, Harris, and Hebert, 2011; Graham et al., 2015; Graham et al., 2012; Koster, Tribushinina, Jong, and van den Bergh, 2015; Morphy and Graham, 2012; Santangelo and Graham, 2016). The findings of these studies included emphases on teaching transcription/'writing-it-down' skills (Graham, Harris, and Fink, 2000; Skar et al., 2021), using stages/strategy instruction that allow for goal setting and for formative feedback or assessment of parts (Fidalgo, Torrance, and García, 2008; Graham et al., 2011; Skar, Jolle, and Aasen, 2020), allowing peer interaction (Koster et al., 2015; Yarrow and Topping, 2001), and stimulating work with a focus towards use of word processing or internet-based programs to scaffold composition of formally published texts (Englert, Zhao, Dunsmore, Collings, and Wolbers, 2007; Morphy and Graham, 2012). Data repeatedly showed that handwriting fluency increased writing composition quality and was higher in girls and higher-grade years. Particularly, teaching of low-level transcription skills (e.g., handwriting and spelling) and high-level self-regulation skills (e.g., monitoring) needs to be done explicitly to enhance composition skills and motivation (Graham et al., 2000; Limpo and Graham, 2020; Limpo, Vigário, Rocha, and Graham, 2020; Salas and Silvente, 2020; Santangelo and Graham, 2016; Skar et al., 2021).

***Overall to successfully improve students' writing and to meet literacy policy and curricula goals, interventions should cover goal setting, stage-based/strategy instruction, text structure instruction, feedback, and peer interaction.***

Various empirical studies showed that both for struggling writers and those writers at grade level, strategy/stage-focused writing instruction intervention including pre-planning stages and feedback increased the tendency to pre-plan texts, enhanced the quality of and reader-focused nature of writing, and enhanced awareness of the importance of text structure (Fidalgo et al., 2008; Graham et al., 2012; Koster et al., 2015; Skar et al., 2020). Peer interaction (paired and grouped planning, co-writing and discussion work) was important in enhancing planning and writing work and feedback upon the stages of work, including improving the quality of the plan and outputs (Graham et al., 2012; Koster et al., 2015; Yarrow and Topping, 2001). Meta-analyses and quasi-experimental studies also revealed that students using publishing tools as a scaffolding condition produced lengthier pieces and received significantly higher ratings on the primary traits associated with writing quality. This was evident in terms of students' increased motivation to write, abilities to produce topic sentences and abilities to generate more topically coherent and legible texts (Camacho, Alves, and Boscolo, 2021; Englert et al., 2007; Graham et al., 2015; Morphy and Graham, 2012).

Overall to successfully improve students' writing and to meet literacy policy and curricula goals, interventions should cover goal setting, stage-based/strategy instruction, text structure instruction, feedback, and peer interaction. Such research-based strategies are all core to Story Factory's work, which further seeks to enhance motivation, self-efficacy and knowledge of compositions and composition planning stages.



IMAGE JACQUEE MANNING

### REFLECTING BENEFITS IDENTIFIED IN 'LEARNING LURES' RESEARCH

A third factor underscoring the value of Story Factory's literacy offerings is the application of methodologies reflecting approaches identified in research as linked to benefits for development and maintenance of student literacy, socio-cultural and wellbeing outcomes.

Firstly, Story Factory's application of Expectancy-Value Theory (EVT) – specifically efforts to increase motivation by encouraging students to see themselves as literate story-tellers – is supported by research. Specifically, it is based on the positive association between motivation and literacy capabilities that has been borne out so far particularly in research studies from Western multi-cultures comparable to Australia in their broad student diversity such as Canada, and to a lesser degree from some Asian studies including from Japan. Multiple ethnographic psychological studies and practice-based applied studies have repeatedly shown that students' self-concept as literate has a correlation with increased reading interest (Inoue, Georgiou, Maekawa, and Parrila, 2021; Katzir, Lesaux, and Kim, 2008; Viljaranta et al., 2017; Viljaranta, Tolvanen, Aunola, and Nurmi, 2014; Walgermo et al., 2018). Further, German surveys of 963 third-graders' beliefs about writing showed writing interest is enhanced by a belief in writing as having

inherent accessibility and value to all students, and this belief can mediate gendered, ableist or other socio-cultural barriers to writing (Birnbaum, Schüller, and Kröner, 2020).

Building on such research, many classroom-based experimental and applied studies showed students' increased reading and writing interest in turn predicts increased attempts at literacy task-focused behaviour (Carroll, Holliman, Weir, and Baroody, 2019; Frijters, Barron, and Brunello, 2000; Inoue et al., 2021; Kikas, Pakarinen, Soodla, Peets, and Lerkkanen, 2017; Kirby, Ball, Geier, Parrila, and Wade-Woolley, 2011). Increased reading interest has also been shown across a range of psychological, sociological and pragmatic applied education studies to have indirect impacts on improved later literacy skills through both increased student effort at task-focused behaviour, and in some cases through expanded overall reading skills (Eccles, 2005; Eccles and Wigfield, 2002; Inoue et al., 2021; Stevenson et al., 1990; Stevenson and Stigler, 1992; Wigfield and Eccles, 2000, 2002). The association between reading self-concept and directly improved reading skills was particularly strong in Canadian data for example, where factors of Western meritocratic notions of individualised self-belief and competitive educational reward for freely-chosen personal effort, reflect the widespread liberal dominance of ideas of selfhood and choice in Australian educational cultures (Jones, 2020; Stevenson et al., 1990; Stevenson and Stigler, 1992). Different motivational influences were important in Asian contexts for example, less reliant on choice-based cultural dynamics.

Secondly, Story Factory's offerings reflect Australian and other research showing the benefit of approaches which foreground the concept of the 'literacy learning lure' (Bahlmann Bollinger and Myers, 2020; Jones, 2020; Wood, 2014). The learning lure draws on aspects of Self-Determination Theory (SDT) (Ryan and Deci, 2000), wherein writing motivation can be either autonomous (engagement in the writing activity because of its inherent satisfaction or value), and/ or controlled (engagement in an activity because of internal pressure such as guilt or external pressure such as social reward). Autonomous motivation is cast in this SDT as a qualitatively better type of motivation; autonomously motivated writers were theorised to perform better on writing tests compared to controlled motivated writers (De Naeghel, Van Keer, Vansteenkiste,

and Rosseel, 2012; Ryan and Deci, 2000); and although cultural differences can offer important explanations for broad differences in grade-based motivations for some student groups very broadly, empirical data nonetheless evidenced increased outcomes for students with multiple motivations including autonomous motivations and social and other motivations (Ng, Graham, Liu, Lau, and Tang, 2021).

### *Secondly, Story Factory's offerings reflect Australian and other research showing the benefit of approaches which foreground the concept of the 'literacy learning lure'*

Story Factory's use of fun popular culture learning lures and opportunities for enjoyable writing work specifically reflect findings in statistical research on 2,500 Australian students aged 14yrs+ supporting associations between educators' incorporation of some popular culture and creative learning lures in lessons in order to gain students' interest in developing their capabilities, and increased educational and wellbeing outcomes for students (Jones, 2020, p. 293). This involves work on the development of genuine text for their ordinary, real-world lives, in their own voice. Compared to students at schools where liberal literacy learning lures were not used, students exposed to these learning lures particularly for literacy reported finding their learning more interesting and relevant (p.293). They also were shown to be statistically less likely to have difficulty concentrating and less likely to have poor educational outcomes or skip classes or school, than students whose schools used more traditional pedagogies and content (p.288). The relationship between effort and ability is learned by students and youth in practice, especially when enjoyment of a task leads to positive outcomes and a desire to increase ability (Nicholls, 1978). Students also tend to have improved relations with educational staff, reporting lower perceived verbal abuse by staff in contexts where liberal learning lures are used (Jones, 2020, p. 288). Students also had improved wellbeing outcomes showing greater socialisation during breaks and activities, and lower rates of self-harm (Jones, 2020, p. 288).

### **ACADEMIC, PARENT AND STUDENT REVIEWS OF STORY FACTORY PROGRAM LITERACY OUTCOMES**

Various literacy outcomes were strongly affirmed in academic, parent and student responses to Story Factory workshops and the specific literacy events the workshops offered. This included for different student types by gender, age and year level for example; and for a range of different benefits over time.

Sydney University academics' evaluations of Story Factory literacy outcomes drew on analyses of the questionnaire data, those stemming from the observational records and those emerging from the detailed analyses of case study participants' writing (Ewing, 2015; Smith and Manuel, 2017). Smith and Manuel (2017, pp.3-8) found in their analysis of a small sample of 88 completed questionnaire evaluations of Story Factory that there were:

- 'Very positive' shifts from initial Story Factory workshops onwards indicative of students learning about the complexity of writing and their own practice.
- Multiple types of evidence supporting how students had growth in self-knowledge and awareness from Story Factory workshops, and that their resultant learning and understanding is a key step towards improvement of participants' writing quality.
- Response changes from students across the data which signalled growth in their learning and understanding about the elements of:
  - 'good' creative writing,
  - effective writing practice (such as collaboration, consideration of audience, capacity to write dialogue and about characters' feelings, disciplined choice of vocabulary, seeking feedback and editing towards improvement and higher standards),
  - their own writing practice and,
  - what about their own writing practice required improvement.

Parents/guardians of Story Factory workshop participants showed they were extremely positive about the impact on their child/children's literacy in phone, email and face-to-face interviews (Smith and Manuel, 2017). All parents had observed the children's increased confidence in their writing and story work. Parents especially reflected on their children's improvements in relation to literacy engagement, learning lures and self-efficacy. For example:

“

**The Parents of Claire (8yrs+) suggested strongly that she had become a self-regulated and independent learner from Story Factory sessions. Claire (8yrs+) completed two Story Factory workshops in different terms one year, and another workshop the next. After the experience, she reported that she became confident in taking part in workshop discussions. After the workshops she showed improvements in self-efficacy in writing about how other people feel; in asking for help if she did not know what to do; and checking and editing her work towards improving it. She reported herself as a capable and improved writer participant who enjoyed Story Factory workshops. Claire's parents reported that she studied harder at school and was more positive about, and more motivated to learn at school since these workshops took place.**

“

**The parent of a son (10yrs) who attended a Story Factory holiday workshop, followed by regular Sunday workshops, said:**

*I would love this program to be rolled out in schools as it brings enjoyment and a sense of purpose to writing and learning in general. SSF excites him because he has begun to realise that writing can be more than just school work, it could be a future for him. This course has opened his eyes to what lies beyond school - writing movies or scripts. Recently he entered a writing competition and he knew how to plan his story. He no longer just puts pen to paper – he stops to think. His way of writing has improved significantly and his grammar has also improved. (...) He is so positive and proud of himself – SSF has given him confidence and improved his self-esteem. He even initiates some of the SSF games with his younger siblings (he's the eldest of 4) at home. His younger siblings are all keen to go too when they're old enough. I think he's also more engaged at school – he's worked out that the more you put in the more you get out of learning and he's more interactive.*

## *Parents/guardians of Story Factory workshop participants showed they were extremely positive about the impact on their child/children's literacy*

A variety of students have directly reported that they experienced deep and diverse value from Story Factory engagements. Smith and Manuel (2017, pp.3-8) found in their analysis of a small sample of 88 completed questionnaire evaluations of the program that nine in ten (89%) of students affirmed that Story Factory 'provides the opportunity for me to write creatively.'

“

**Farhan (11yrs) was typical of those students whose overall literacy and personal writing 'voice' greatly improved by understanding functional and critical literacy work stages and skills. He began at Story Factory sessions during Term 1 in the full-year Novella workshop. He was observed to develop the skills to communicate often and easily with both adults and peers, confident in introducing, discussing and explaining his ideas both with and without prompting. The observation record of Farhan showed he was beginning to find his 'voice' in his writing; expressing his own ideas as well as discussing these; and taking opportunities for negotiated feedback from his facilitator and tutor to ensure that his writing retained his original intentions. His drafts and redrafts of his story showed his efforts to edit his story through the addition of detail and a clearer sequencing of events across the sessions.**

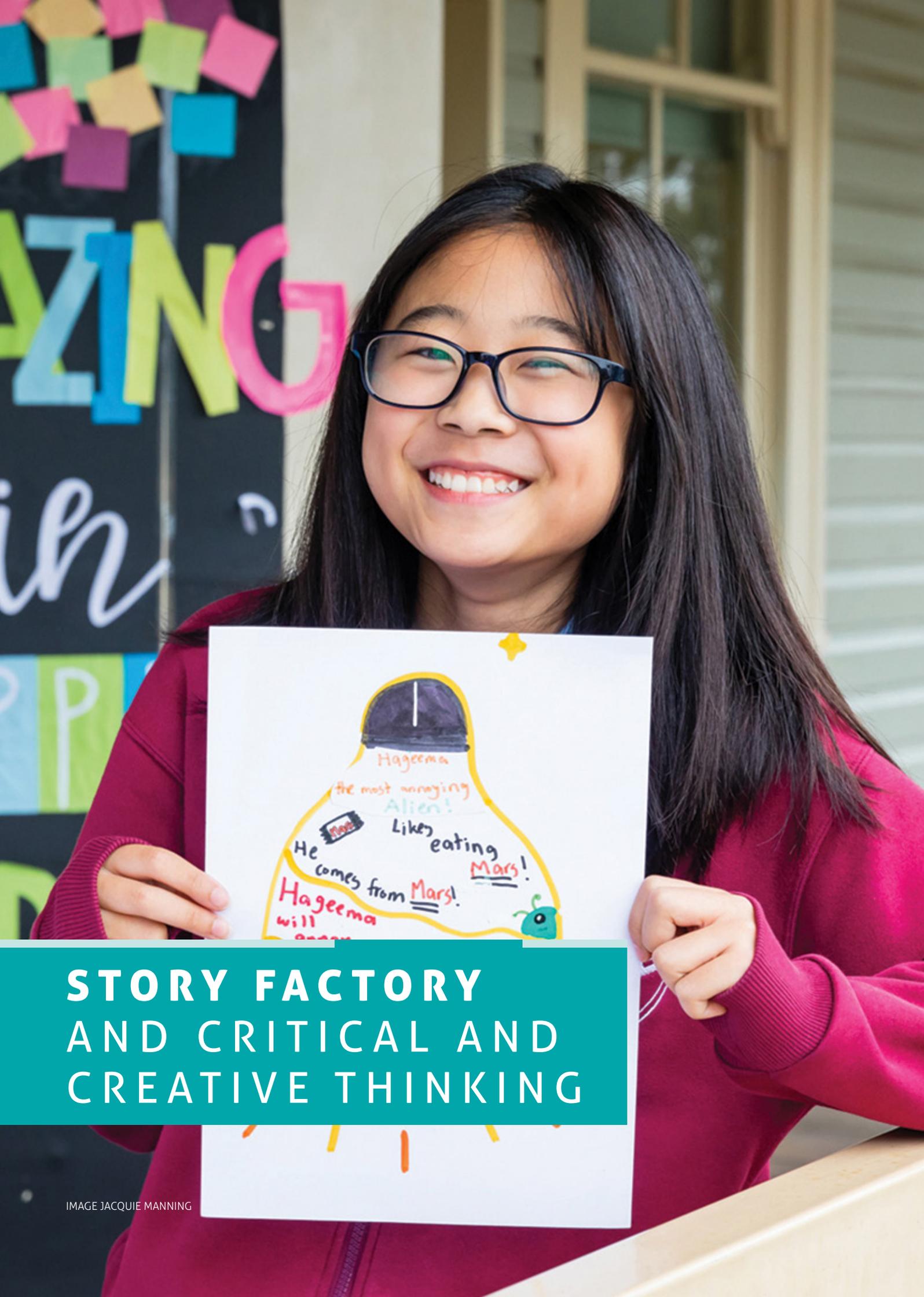
In sum, Story Factory approaches are in alignment with key literacy and literacy education theories, supporting strategic approaches to literacy and enhancing the autonomous motivation of students. They are pitched at creating literacy events (staged idea generation activities, writing tasks and so on) that have inherent value (cultural connections and fun) for the student

## *In sum, Story Factory approaches are in alignment with key literacy and literacy education theories*

groups engaged in the work. These practices have associations not only with increased educational outcomes, but also increased relational and wellbeing outcomes; such as greater socialisation with staff and students, and reduced self-harm. Responses in evaluation data and reviews provided by academic experts, parents/guardians and students showed multiple benefits were experienced from Story Factory workshops for different components of literacy and different education stakeholders.



IMAGE: JACQUIE MANNING



**STORY FACTORY  
AND CRITICAL AND  
CREATIVE THINKING**

**CRITICAL and creative thinking capabilities are core 21st century skills crucial to the developing workforce (Halpern, 2013; Utami, 2018). The Australian Curriculum now emphasises general capabilities for students in critical and creative thinking for pedagogical attention, assessment and reporting across each subject's syllabus at the discretion of each state or territory (ACARA, n.d.). ACARA maps and displays these capabilities in a continuum, with clearly articulated documentation outlining what is required of students at each level. Further, various national and state standards for educators (e.g., NSW Education Standards Authority, 2021) highlight the need for teachers to develop creativity in their lesson planning around creative practice and for their professional development. Critical and creative thinking capabilities are also key concerns for employment organisations across a variety of industries; many modern organisations have adopted the view of individual employee creativity as an essential requirement for innovation and called for greater creativity education (Anderson, Potočnik, and Zhou, 2014; Collard and Looney, 2014; London, 2019). However, Australian students' results have declined in these domains since 2000 and teachers, like all adults, can need assistance or professional development in reconnecting with creativity skills (ACARA, 2021; Collard and Looney, 2014). Story Factory aims to ensure teachers can be supported and assisted with the skills necessary for new and appropriate creative design and to offer opportunities for students in the development of these capabilities. Story Factory foregrounds opportunities to develop critical and creative thinking based on theoretical and empirical research and academic literature in education – positioning students to reap the benefits of expansions in their critical thought and creativity.**

### **APPLYING CRITICALITY, CREATIVITY AND CREATIVITY EDUCATION THEORIES**

Story Factory's offerings are linked in concrete ways to critical and creative thinking capabilities and related creativity education theories. Creative and critical thinking capabilities have been modelled in different ways. The different models depended on whether creative and critical thinking capabilities were defined as the use of imagination or original ideas to create something; inventiveness; or the ability to assess concepts contextually (London, 2019). These different models can be focussed on individuals, their processes or activities within systems of critical and creative output (Collard and Looney, 2014; London, 2019). Story Factory offerings range from professional development

for teachers including 'creativity in the classroom' – specifically about giving teachers a framework to 'see' creativity in action in their classroom; through to student-focussed sessions. Story Factory work draws on several creativity models – specifically Socio-cultural Developmental Models of individual critical and creative thinking, and particularly draws on Process-based/ activity models including the Eight Facets of Creativity Model and the Five Dimensional Model of Creativity and its Assessment in Schools.

## *Story Factory's view of activities draws on widespread contemporary theory casting creativity as process-based.*

Story Factory does not conceive of critical and creative capabilities as fixed in the individual, as in early creativity models which focus on finding and assisting only naturally gifted creative individuals (Guilford, 1950, 1967; Hui and Lau, 2012). It recognises socio-cultural developmental models in which these are capabilities that can be learned and, ideally, nurtured towards improvement in the generation of ideas, problem solving and analysis for example (Amabile, 1990; Collard and Looney, 2014; Runco and Albert, 1986). Research has shown that individuals are more creative in environments that encourage exploration and independent work and that value originality (Amabile, 1990, 1996); and case studies and self-reporting surveys across and beyond the Asia-Pacific have emphasised the importance of integrating students' home lives, experiences and cultural backgrounds in critical and creative thinking education (Dawson, Tan, and McWilliam, 2011; Li, 2020). It is also important to stage critical and creative thinking through peer planning and discussion sessions (Bayat, 2016; Graham, McKeown, Kiuahara, and Harris, 2012; Yarrow and Topping, 2001).

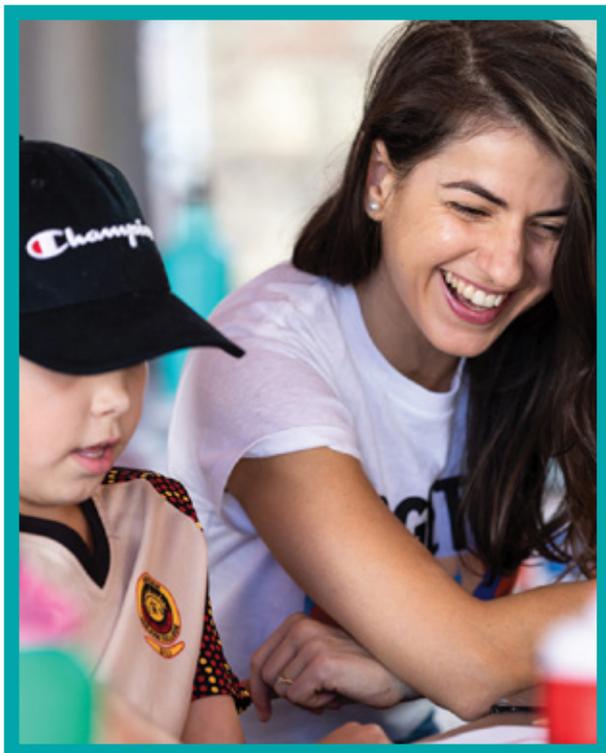


IMAGE JIM A BAKER

Story Factory therefore holds that creating socio-cultural contexts encouraging open learning can have a significant impact on the development of critical and creative capabilities of individuals. Educators can assist in nurturing:

- creative openness to experiences and unknowns (Amabile, 1990; Barron, 1969; Collard and Looney, 2014; Edwards, 2001; London, 2019; McCrae and Costa, 1987);
- creative self-efficacy and self-motivation (Bandura, 1997; Csikszentmihalyi, 1990);
- effort and persistence (Grant and Dweck, 2003);
- the ability to generate, critically reflect on and synthesise diverse ideas (Atchley, Keeney, and Burgess, 1999; Bayat, 2016; Sternberg and Kaufman, 2010; Torrance, 1974).

## *These opportunities to revisit creation processes enable students to experience mistakes, pathways and choices that are rejected or refined as part of the journey to successful creation.*

Story Factory's view of activities draws on widespread contemporary theory casting creativity as process-based. Process-based Models of Creativity emphasise that critical and creative activities occur in stages in response to inspirational stimuli (Amabile, 1988; Couger, 1995; Lubart, 2001; Sawyer, 2012; Wallas, 1926). These stimuli are provided appropriate to age-level and context for diverse student cohorts in a range of Story Factory programs. These activities are also theorised as involving particular interactive factors (Glăveanu, 2013; Rhodes, 1961; Seidel, Müller-Wienbergen, and Becker, 2010). This factorial (or confluence or interactionist) view of creativity argues that while creative solutions may emerge from an iterative, logical process, creative action is ultimately the result of an interaction among the individual, their process and the environment which is taken into consideration. Story Factory's work is confluent with the guidance of theorists who argue that an activity-centric view of creativity using an abstract process affords greater specificity for targeted creative education interventions (London, 2019; Mumford, Mobley, Reiter-Palmon, Uhlman, and Doares, 1991; Sawyer, 2012; Shneiderman, 2000).

Activities can be theorised as further enhanced by breaking down creativity into core components (Csikszentmihalyi, 2014; London, 2019). Story Factory's creativity development and enhancement interventions employ the Five Dimensional Model of Creativity and its Assessment in Schools (Lucas, 2016) and Eight Facets of Creativity Model developed by educator Keith Sawyer (2012), in the design of activities theorised as core within creative processes. Lucas (2016) posits that:

- a. When teachers understand creativity they are more effective in cultivating it in learners; and
- b. When students have a better understanding of what creativity is, they are better able to develop and to track the development of their own creative habits of mind.

Sawyer's model allows teachers to frame and structure their own thinking about creativity as an ongoing project with eight non-linear facets that students bounce between, but which can form a system to be learned. Sawyer's Eight Facets include:

1. Ask: ask an inspiring question, seek a good problem;
2. Learn: practice and master the technical aspects;
3. Look: be aware of the new and unusual;
4. Play: allow your mind to play and experiment;
5. Think: have lots of ideas, this means lots of possibilities;
6. Fuse: successful creativity comes from ideas in combination;
7. Choose: tension between uncritical wide-open ideas and critical examination; and
8. Make: make ideas a reality (Sawyer, 2012).

For Sawyer creativity is a set of behaviours students can learn and improve, best enhanced by pedagogical processes affording multiple play and curiosity stimuli across occasions to engage in the behaviours of creation, which accumulate over time. These opportunities to revisit creation processes enable students to experience mistakes, pathways and choices that are rejected or refined as part of the journey to successful creation. These opportunities allow students to become aware of and rehearse different facets of the creative processes, from a young age, and for adults to openly revisit and reflect on the value of each of these facets along the way.

## REFLECTING BENEFITS IDENTIFIED IN CRITICALITY, CREATIVITY AND CREATIVITY EDUCATION RESEARCH

Story Factory's offerings follow methodologies reflecting approaches identified in research as linked to benefits for development and maintenance of student creativity. Studies have shown students responded to the intentional use of 'critical-affective pedagogies': those teaching strategies centring the perspectives and feelings of students and their socio-cultural communities. These are designed to centre adult educators' vulnerability as an invitation for children to serve as witnesses and engage more thoroughly in leading educational activities (Cartun and Dutro, 2020; Jones, 2020; Karam and Elfiel, 2021). One US longitudinal action-based intervention study of 25 novice teachers' modelling of risky and vulnerable writing showed it can function as an important invitation for students to do the same (Cartun and Dutro, 2020). When educators and students contextualise their work as having an emotional aspect relying on trust, and highlight the value of building their relationship safely together, the practice of collective risk-taking as central to their learning together enhanced the emotional and experimental nature of creative writing work. In an Australian survey of 2,500 students aged 14yrs+, critical approaches to education broadly and literacy education specifically had a range of strong educational outcomes for students. Critical approaches to education – including critical thinking applied to incorporation of diverse popular cultures and storytelling, use of technologies and engagement with a wide variety of storytelling media – have even stronger associations with lowered student drop-out and truancy rates, and benefits to students' concentration and marks (Jones, 2020, p. 288). Students' comments on critical approaches to literacy included acknowledgement of how the sense of freedom in their work enhanced their enjoyment of class sessions, and carry-over of learning into their lives (Jones, 2020, pp. 294-297). Further, engaging students in creative writing for publication can de-centre the normalisation of adult perspectives on the world and classroom content, allowing for more creative perspectives from youth in general critical and creative classroom discussions (Dobson, Stephenson, and De Arede, 2021).

Another important aspect of developing critical and creative thinking is exposure to a variety of concepts and text structures, and an ability to interfere in and reform them. Middle Eastern studies of critical and creative thinking capabilities have sought to emphasise the importance of these different activities in creative writing classes for developing critical and creative skills in students (Karam and Elfiel, 2021; Sahin, 2019 ; Ulu and Yemenici, 2021). A Turkish study decried the over-emphasis on scientific invention in creative writing activities that can come from STEM-focussed education systems, and promoted engagement with and transformation of multi-modal cultural texts for enhancing critical thinking at any age (Ulu and Yemenici, 2021). This could involve explaining songs, poems, imagery, fairy-tales; and then changing them into new text formats like advertisements, propaganda, diary entries or recipes for example. An Egyptian study argued that compression is a hallmark of creativity, demonstrating the effect of the process of compression and decompression on the cultivation of creative potentials (Karam and Elfiel, 2021). This study suggested that engaging students in unpacking compressed (shortened) source texts – picking apart their features and components – generates higher divergent thinking and encourages the students to translate their ideational processes into more creative writing. A Saudi study of students for whom English was their second language, sought to address students’ difficulties in creative aspects of thinking and writing through pro-actively and directly teaching them critical and creative thinking steps and enabling them to assess their own work and others’ using the steps as checklists (Almelhi, 2021). Being able to name and assess aspects of critical and creative processes outright, furthered students’ belief in their ability to produce creative work and their actual production of creative angles in their work.

*Students’ comments on critical approaches to literacy included acknowledgement of how the sense of freedom in their work enhanced their enjoyment of class sessions, and carry-over of learning into their lives*

IMAGE JACQUIE MANNING



A further key aspect of writing motivation relevant to creativity therefore is self-efficacy, however it is too easy to overlook how self-efficacy around critical and creative thinking practices impacts students’ overall ideas on whether they are capable of writing. Writing self-efficacy has been principally conceptualised as having only one dimension (overall self assessment); perhaps in ways detrimental to the teaching of writing in the past. However, over time creative writing and creativity experts have increasingly argued for recognising the multidimensional character of self-efficacy for writing (Bruning, Dempsey, Kauffman, McKim, and Zumburn, 2013; Du et al., 2020). They have argued for distinguishing between different types of self-efficacy for writing including specifically:

- a. self-efficacy for ideation/creativity – the beliefs a student has about their own ability to invent ideas;
- b. self-efficacy for conventions – the beliefs a student has about their own ability to critically apply writing conventions, and
- c. self-efficacy for regulation/goal achievement – what students believe about their ability to critically regulate their own writing goal achievement behaviours (Bruning et al., 2013; Du et al., 2020; Limpo et al., 2020).

Multiple Chinese studies have suggested that, in general, achievement of goals was closely related to creativity, and creative self-efficacy mediated increased achievement broadly (Du et al., 2020).

In teasing out and staging out critical and creative thinking aspects of writing and allowing engagement with others in pairs and groups in the development of ideas, invention, writing convention application and writing behaviours, Story Factory programs allow students to build confidence in these different sub-types of writing self-efficacy over time. Students can start to realise that critical and creative thinking involves specific skills which can be learned, trialled, rehearsed, and improved over time. Improvement can come not just from successful ideas, but also from thinking about ideas that were problematic, and understanding why the ideas did and did not work.

*Students can start to realise that critical and creative thinking involves specific skills which can be learned, trialled, rehearsed, and improved over time.*

Finally, critical and creative thinking practices have been shown to predict students' creative writing outcomes in various meta-analyses (Graham et al., 2012; Koster, Tribushinina, Jong, and van den Bergh, 2015; Morphy and Graham, 2012; Sahin, 2019 ). Specifically, meta-analyses of creative interventions across multiple studies including the use of image-based creative stimuli have shown that creative stimuli interventions lead to a significant improvement in writing outputs and creative thinking about reader experience particularly for students struggling with their writing, and those at grade level for younger and older years (Koster et al., 2015). Creative and critical discussions with peers about the imagery or stimuli enhanced outcomes at the planning stages (Koster et al., 2015; Yarrow and Topping, 2001). Furthermore, in an elementary focussed meta-analysis, the use of creativity and imagery was seen to be particularly important (Graham et al., 2012). However, it is also notable that a complementary relationship between time spent writing and creative thinking development may also be seen – emerging studies are showing that creative writing activities expand critical and creative thinking capabilities

(Popović, 2021; Taylor, Kaufman, and Barbot, 2021). For example, one study examined effort in narrative creative writing (operationalised as time-on-task) using a new assessment approach, the storyboard task (Taylor et al., 2021). Students' time-on-task was strongly, positively associated with increased overall creativity measure scores; both when rated by novice or experienced raters using a range of tools. Additionally, story length and time-on-task were moderately correlated with the external criterion measures of creativity. Another study showed that students who engaged in creative writing tasks increased their ability to discuss their work in terms of creativity strategies/scales and to discuss their increased abilities in these skills (Popović, 2021). Thus, the strong associations suggested the importance of creative writing time for development of critical and creative thinking skills, and self-efficacy in these skills.

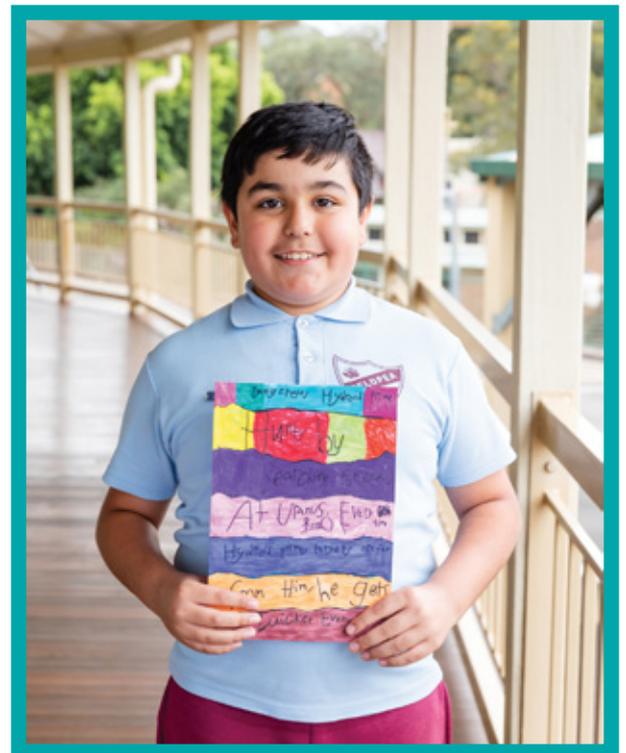


IMAGE JACQUIE MANNING

## ACADEMIC, PARENT AND STUDENT REVIEWS OF STORY FACTORY PROGRAM CRITICAL AND CREATIVE THINKING OUTCOMES

Outcomes around creative and critical thinking emerged in academic, parent and student responses to Story Factory workshops in key evaluation data. This included for different student types by gender, age and year level for example; and for a range of different benefits over time.

Story Factory evaluations overseen by Sydney University academics used analyses of the questionnaire data, those stemming from the observational records and those emerging from the detailed analyses of case study participants' emerging critical and creative thinking capabilities (Ewing, 2015; Smith and Manuel, 2017). The academics argued it was the students' writing, the product of the workshops, that provided the strongest evidence of not only students' ideas, but also of the development of and growth in their writing skills and capacities (Smith and Manuel, 2017, pp. 7-8). In 2013, work began on creating a framework for analysis of students' writing that would enable the Evaluation Team to assess students' writing development, with a particular emphasis on identifying this development in the dimensions of creativity. From June 2013 to June 2016, 82 sets of student writing were analysed, using the academics' uniquely developed framework. When a student attended at least two workshops, the framework showed their writing demonstrated increased capacity to:

- Explore writing topics guided by the story-teller;
- Apply learned strategies for planning and prewriting;
- Draw on a greater repertoire of vocabulary;
- Experiment with ideas and test these with tutors and peers;
- Write with a sense of audience and purpose;
- Balance personal and emotional investment with skills in informal research and discussion with others;
- Edit and add detail to their writing with continued guidance;
- Seek assistance and initiate conversations about ideas and writing;
- Experience enthusiasm for writing and creating a 'product';
- Reflect on the process of writing and develop confidence in their writing ability;
- Invest in the quality of the 'product' that will be presented to 'real' audiences; and
- Take pride in their finished piece (Smith and Manuel, 2017).

### *Interviews undertaken with parents/guardians of Story Factory workshop participants reflected a considerable shift in the critical and creative thinking capabilities of their child/children*

Students' growth and positive results from Story Factory programs were especially maximised when the workshops were continuous over a full term, carefully structured and scaffolded (Smith and Manuel, 2017). Observations of 14 case study students over time indicated that they:

- Generally enjoyed being in the workshops;
- Were relaxed and communicated easily and confidently with both adults and peers;
- Were focused and continually engaged in the workshop activity;
- Showed greater confidence in sharing and discussing ideas with others, than they believed they could have; and
- Showed 'creativity' elements most strongly in evidencing collaboration, followed by discipline – particularly 'attention to detail' and 'editing towards improvement' – especially towards the end of workshops (Smith and Manuel, 2017).

Interviews undertaken with parents/guardians of Story Factory workshop participants reflected a considerable shift in the critical and creative thinking capabilities of their child/children (Smith and Manuel, 2017). All parents had observed the children's increased confidence in their writing and story work. Parents especially reflected on their children's improvements in relation to literacy engagement, learning lures and self-efficacy.

“

**The Mother of Sebastian (13yrs+) said he became an avid reader after completing various Story Factory workshops for four years, and spoke more confidently 'due to meeting a variety of people at SF and becoming more versatile in the range of people he can mix with' (an observation confirmed by some of his teachers at school). She reported that Sebastian had an increased motivation to write; a wider vocabulary; and much improved writing skills. He was more creative and co-operative at home. She added that Sebastian has 'studied harder to do well at school', 'is 'more positive about learning at school', 'more confident about his ability to learn' and 'more actively engaged in learning activities'.**

A variety of students have directly reported that they experienced benefits to their critical and creative thinking capabilities from Story Factory engagements. Smith and Manuel (2017, pp.3-8) found in their analysis of a small sample of 88 completed questionnaire evaluations of the program that nine in ten (89%) of students affirmed that Story Factory 'provides the opportunity for me to write creatively.'

“

**Hayley (10+yrs) was typical of the type of student who improved her ability to think critically and creatively. She attended four workshops across two years and consistently said that she did not find it easy to express her ideas in writing or to write creatively. She suggested her best quality writing resulted from the 'Story in a Box' workshop where the workshop leader provided lots of ideas as stimuli. Her writing from later workshops demonstrated significant growth in writing skills; was judged to achieve all relevant indicators of the Developing stage and the large majority in the Transitional stage (7-9 years). This writing provided evidence of increased imagination and creative historical appropriation in the creation of characters, and strategies that provided increased coherence of plot.**

# SUMMARY

In sum, Story Factory approaches are aimed at alignment with key criticality, creativity and creativity education theories. The programs support socio-cultural developmental and staged approaches to building the core components for students' critical and creative capabilities. They also enhanced self-efficacy. The programs' practices have associations with increased educational outcomes including increased skills development and self-efficacy around these skills, and increased concentration and marks. Further, they also lowered disengagement, including student drop-out and truancy rates. Academic, parent and student program evaluation responses also provided data and analyses strongly affirming the value of Story Factory workshops for critical and creative thinking.



# REFERENCES

## CHAPTER 1

- ACARA. (2021a). *Critical and Creative Thinking Capability Learning Continuum*. Canberra: Australian Curriculum Assessment and Reporting Authority.
- ACARA. (2021b). *Information and Communication Technology Capability Learning Continuum*. Canberra: Australian Curriculum Assessment and Reporting Authority.
- ACARA. (2021c). *Intercultural Understanding Capability Learning Continuum*. Canberra: Australian Curriculum Assessment and Reporting Authority.
- ACARA. (2021d). *Literacy Capability Learning Continuum*. Canberra: Australian Curriculum Assessment and Reporting Authority.
- ACARA. (2021e). *NAPLAN 2021 SUMMARY RESULTS DATA*. Retrieved from <https://www.acara.edu.au/docs/default-source/media-releases/20210813-naplan-results-med-rel.pdf>
- ACARA. (n.d.). *Australian Curriculum*. Retrieved from <https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/>
- Australian Bureau of Statistics. (2020). *Schools, 2020*. Canberra: Australian Bureau of Statistics.
- Australian Council for Educational Research. (2019). *PISA 2018: Australian students' performance*. Canberra: Australian Council for Educational Research.
- Crato, N. (2021). *Improving a Country's Education*. Lisbon: Springer.
- Halpern, D. (2013). *Thought and Knowledge: An Introduction to Critical Thinking*. New York: Psychology Press.
- Mitchell, R. J., Cameron, C. M., McMaugh, A., Lystad, Reidar P., Badgery-Parker, T., and Ryder, T. (2021). The impact of childhood injury and injury severity on school performance and high school completion in Australia: a matched population-based retrospective cohort study. *BMC Pediatrics*, 21(426), 1-14.
- NSW Education Standards Authority. (2021a, 14.05.21). *The Australian Professional Standards for Teachers (the Standards)*. Retrieved from <https://educationstandards.nsw.edu.au/wps/portal/nesa/teacher-accreditation/meeting-requirements/the-standards>
- NSW Education Standards Authority. (2021b). *Proficient Teacher Support Document: Examples of Practice at Proficient Teacher*. Sydney: NSW Education Standards Authority.
- NSW Government. (2020). *Response to the NSW Curriculum Review final report*. Sydney: NSW Government.
- OECD. (2020). *The Impact of COVID-19 on Education*. Paris: Organisation for Economic Co-operation and Development.
- Polesel, J., Rice, S., and Dulfer, N. (2014). The impact of high-stakes testing on curriculum and pedagogy: a teacher perspective from Australia. *Journal of Education Policy*, 29, 640-657. Retrieved from <https://doi.org/10.1080/02680939.2013.865082>
- Ritchhart, R. (2015). *Creating Cultures of Thinking*. San Francisco: Jossey-Bass.
- Seddon, T. (2001). National curriculum in Australia? A matter of politics, powerful knowledge and the regulation of learning. *Pedagogy, culture and society*, 9(3), 307-331. Retrieved from <https://doi.org/10.1080/14681360100200127>
- UNESCO. (2021). *Pandemic-related disruptions to schooling and impacts on learning proficiency indicators: A focus on the early grades*. Montreal: United Nations Educational Scientific and Cultural Organisation Institute for Statistics.
- Utami, I. (2018). The effect of blended learning model on senior high school students' achievement. *SHS Web Conf*, 42(1), 27-33.
- Yates, L., Collins, C., and O'Connor, K. (2011). *Australia's curriculum dilemmas : state cultures and the big issues*. Melbourne: Melbourne University Publishing.

## CHAPTER 2

- Amabile, T. M. (1982). Social psychology of creativity: A Consensual Assessment Technique. *Journal of Personality and Social Psychology*, 43(1), 997-1013.
- Barton, D. (2001). Directions for literacy research: analysing language and social practices in a textually mediated world. *Language and Education*, 1(1), 104.
- Bayat, S. (2016). The effectiveness of the creative writing instruction program based on speaking activities (CWIPSA). *International Electronic Journal of Elementary Education*, 8(4), 617-628.

- Berninger, V., and Amtmann, D. (2003). Preventing written expression disabilities through early and continuing assessment and intervention for handwriting and/or spelling problems: Research into practice. In H. Swanson, K. Harris, and S. Graham (Eds.), *Handbook of Learning Disabilities* (pp. 323-344). New York: Guilford Press.
- Black, K., Sexton, J., Haberman, A., Jameson, M., and Packard, J. (2017). *Investigation to Understand the Assessment of Critical Thinking in UNC's Liberal Arts Core*. Greeley: University of Northern Colorado.
- Brown, C. (2019). *How to assess student engagement*. New York: Classcraft Studios Inc.
- Clear Horizons. (2019). *Good practice approaches to measuring outcomes in young people*. Sydney: The Story Factory.
- Crouch, R., Keys, C. B., and McMahon, S. D. (2014). Student-teacher relationships matter for school inclusion: School belonging, disability, and school transitions. *Journal of Prevention and Intervention in the Community*, 42(1), 20-30. doi:10.1080/10852352.2014.855054
- De Smedt, F., Van Keer, H., and Merchie, E. (2016). Student, teacher and class-level correlates of Flemish late elementary school children's writing performance. *Reading and writing*, 29(5), 833-868.
- Eccles, J. S. (2005). Subjective task value and the Eccles et al. model of achievement-related choices. In A. J. Elliot and C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 105-121). New York: Guilford Press.
- Eccles, J. S., and Wigfield, A. (2002). Motivational belief, values, and goals. *Annual Review of Psychology*, 53(1), 109-132.
- Gantschnig, B., Hemmingsson, H., and La Cour, K. (2011). Feeling and Being Involved? Participation Experienced by Children with Disabilities at Regular Schools in Austria. *Journal of Occupational Therapy Schools and Early Intervention*, 4(3-4), 260-275.
- Genlott, A., and Grönlund, A. (2013). Improving literacy skills through learning reading by writing: The iWTR method presented and tested. *Computers and Education*, 67(1), 98-104.
- Graham, S., Gillespie, A., and McKeown, D. (2013). Writing: Importance, development, and instruction. *Reading and Writing*, 26(1), 1-15.
- Graham, S., and Harris, K. R. (1989). Components analysis of cognitive strategy instruction: Effects on learning disabled students' compositions and self-efficacy. *Journal of Educational Psychology*, 81(1), 353-361.
- Graham, S., McKeown, D., Kihara, S., and Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology*, 104(1), 879-896.
- Halliday, M. (1975). *Learning How to Mean: Explorations in the Development of Language*. London: Edward Arnold.
- Hennessey, B. A., Amabile, T. M., and Mueller, J. S. (2011). Consensual Assessment. In (Eds.). In M. A. Runco and S. R. Pritzker (Eds.), *Encyclopedia of creativity* (Vol. 1, pp. 253-260). San Diego: Academic Press.
- Hidi, S., and Boscolo, P. (2006). Motivation and writing. In C. MacArthur, S. Graham, and J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 144-157). New York: The Guilford Press.
- Hughston, L. (2015). *Acinonyx Cervidae Hircus: Child-Led Evaluation of the Building Skills for Life programme in Cambodia*. London: Plan UK.
- Jasmine, J., and Weiner, W. (2007). The Effects of Writing Workshop on Abilities of First Grade Students to Become Confident and Independent Writers. *Early Childhood Education Journal*, 35(1), 131-139.
- Kim, Z. (2006). Can We Trust Creativity Tests? A Review of the Torrance Tests of Creative Thinking (TTCT). *Creativity Research Journal*, 18(1), 3-14.
- Luke, A., and Peter, T. (1997). The social practices of reading. In S. Muspratt and A. Luke (Eds.), *Constructing critical literacies* (pp. 185-225). New Jersey: Hampton Press.
- McLeod, S. A. (2018). Attitude measurement. *Simply Psychology*. Retrieved from <https://www.simplypsychology.org/attitude-measurement.html>
- Millar, G., and Dahl, C. (2011). *The Power of Creativity*. Alberta: Alberta Teachers Association Magazine.
- National Literacy Trust. (2015). *Children's and Young People's Reading in 2015*. London: National Literacy Trust.
- Nilsson, P. (2012). Four Ways to Measure Creativity. *Sense and Sensation Writing on Education, Creativity, and Cognitive Science*. Retrieved from <http://www.senseandsensation.com/2012/03/assessingcreativity.html>
- Pajares, F., and Johnson, M. J. (1994). Confidence and competence in writing: The role of writing self-efficacy, outcome expectancy, and apprehension. *Research in the Teaching of English*, 28(1), 313-331.
- Quaglia, R. J., and Cobb, C. D. (1996). Toward a Theory of Student Aspirations. *Journal of Research in Rural Education*, 12(3), 127-132.
- Roeser, R. W., Midgley, C., and Urda, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology*, 88(3), 408-422. doi:10.1037/0022-0663.88.3.408
- Said-Metwaly, S., Noortgate, W., and Kyndt, E. (2017). Approaches to Measuring Creativity: A Systematic Literature Review. *Creativity: Theories Research Applications*, 4(2), 238-275.

Street, B. (1984). *Literacy in theory and practice*. Cambridge: Cambridge University Press.

Sullivan, A. M., Johnson, B., Owens, L., and Conway, R. (2014). Punish Them or Engage Them? Teachers' Views of Unproductive Student Behaviours in the Classroom. *Australian Journal of Teacher Education*, 39(6). Retrieved from <http://dx.doi.org/10.14221/ajte.2014v39n6.6>

Wasser, N. A. (2021). *Narrative as Writing and Literacy Pedagogy for Preservice Elementary Teachers : Giving Children and Teachers a Voice*. Boston: Brill.

Wolery, M., Sigalove Brashers, M., and Neitzel, J. C. (2002). Ecological Congruence Assessment for Classroom Activities and Routines: Identifying Goals and Intervention Practices in Childcare. *Topics in Early Childhood*, 22(Special Edition), 131-142. doi:10.1177/02711214020220030101

Yarrow, F., and Topping, K. (2001). Collaborative writing: The effects of metacognitive prompting and structured peer interaction. *British Journal of Educational Psychology*, 71(2), 261-282.

### CHAPTER 3

ACARA. (2021a). *Critical and Creative Thinking Capability Learning Continuum*. Canberra: Australian Curriculum Assessment and Reporting Authority.

ACARA. (2021b). *Information and Communication Technology Capability Learning Continuum*. Canberra: Australian Curriculum Assessment and Reporting Authority.

ACARA. (2021c). *Intercultural Understanding Capability Learning Continuum*. Canberra: Australian Curriculum Assessment and Reporting Authority.

ACARA. (2021d). *Literacy Capability Learning Continuum*. Canberra: Australian Curriculum Assessment and Reporting Authority.

ACARA. (2021e). *NAPLAN 2021 SUMMARY RESULTS DATA*. Retrieved from <https://www.acara.edu.au/docs/default-source/media-releases/20210813-naplan-results-med-rel.pdf>

Bingham, G., Quinn, M., and Gerde, H. (2017). Examining early childhood teachers' writing practices: Associations between pedagogical supports and children's writing skills. *Early Childhood Research Quarterly*, 39(1), 35-46.

Cachia, R., Ferrari, A., Ala-Mutka, K., and Punie, Y. (2010). *Creative Learning and Innovative Teaching: final report on the study on creativity and innovation in education in the EU member states*. Seville: Institute for Prospective Technological Studies.

Clark, R. W. (1999). School-university partnerships and professional development schools. *Peabody Journal of Education*, 74(3and4), 164-177.

Collard, P., and Looney, J. (2014). Nurturing Creativity in Education. *European Journal of Education*, 49(3), 348-364.

Collinson, V., Fedoruk Cook, T., and Conley, S. (2006). Organizational learning in schools and school systems: Improving learning, teaching, and leading. *Theory into Practice*, 45(2), 107-116.

Craft, A. (2001). *An Analysis of Research and Literature on Creativity in Education*. London: UK Qualifications and Curriculum Authority.

De Smedt, F., Van Keer, H., and Merchie, E. (2016). Student, teacher and class-level correlates of Flemish late elementary school children's writing performance. *Reading and writing*, 29(5), 833-868.

Dickinson, D., and McCabe, A. (2001). Bringing it all together: The multiple origins, skills, and environmental supports of early literacy. *Learning Disabilities Research and Practice*, 16(4), 186-202.

Ewing, R. (2015). *Not for the faint-hearted: An Ethnographic Case Study Report on the Sydney Story Factory picture book workshop at National Centre for Indigenous Excellence*. National Centre for Indigenous Excellence: Sydney.

Fryer, M. (1996). *Creative Teaching and Learning*. London: Paul Chapman Publishing.

Gilbert, F. (2021). Why Teach Creative Writing? Examining the Challenges of Its Pedagogies. *Changing English: Studies in Culture and Education*, 28(2), 148-168

Graham, S., Wolbers, K., Dostal, H., and Holcomb, L. (2021). Does teacher self-efficacy predict writing practices of teachers of deaf and hard of hearing students? *Journal of Deaf Studies and Deaf Education*, 26(3), 438-450.

Halpern, D. (2013). *Thought and Knowledge: An Introduction to Critical Thinking*. New York: Psychology Press.

Huett, J., Kalinowski, K., Moller, L., and Huett, K. (2008). Improving the motivation and retention of online students through the use of ARCS-based e-mails. *American Journal of Distance Education*, 22(3), 159-176.

Hui, A., and Lau, S. (2012). Formulation of Policy and Strategy in Developing Creativity Education in Four Asian Chinese Societies: A Policy Analysis. *The Journal of creative behavior*, 44(4), 215-235.

Jeon, E.-Y. (2021). What makes them the best English teachers? An analysis of the motivational strategy use based on ARCS model. *Educational Research for Policy and Practice*, 20(1), 263-278.

Joe, J.-O. (2014). A study on ARCS model's application for the development of learning motivation of college general English education. *Korean Journal of General Education*, 12(8), 111-141.

- Karimi, M., and Zade, S. (2019). Teachers' use of motivational strategies: Effects of motivation-oriented professional development course. *Innovation in Language Learning and Teaching*, 13(2), 194–204.
- Keller, J. (2010). *Motivational design for learning and performance: The ARCS model approach*. New York: Springer.
- Kurt, P., and Keçik, I. (2017). The effects of ARCS motivational model on student motivation to learn English. *European Journal of Foreign Language Teaching*, 2(1), 22–44.
- Lamb, M. (2017). The motivational dimension of language teaching. *Language Teaching*, 50(3), 301–346.
- Lamont, E., Jeffes, J., and Lord, P. (2010). *Evaluation of the Nature and Impact of the Creative Partnerships Programme on the Teaching Workforce*. Slough: National Foundation for Educational Research.
- Landry, S. H., Anthony, J. L., Swank, P. R., and Monseque-Bailey, P. (2009). Effectiveness of comprehensive professional development for teachers of at-risk preschoolers? *Journal of Educational Psychology*, 101(2), 448–465.
- Littlejohn, A. (2008). The tip of the iceberg: Factors affecting learner motivation. *RELC Journal*, 39(2), 214–225.
- Lucas, B., Claxton, G., and Spencer, E. (2013). *Progression in student creativity in school: first steps towards new forms of formative assessments*. Paris: OECD Education.
- Maeng, U., and Lee, S. (2015). EFL teachers' behavior of using motivational strategies: The case of teaching in the Korean context. *Teaching and Teacher Education*, 46(1), 25–36.
- Malone, T. W., and Lepper, M. R. (1987). Making learning fun: A taxonomy of intrinsic motivations for learning. In R. Snow and M. Farr (Eds.), *Aptitude, learning, and instruction, conative and affective process analyses* (pp. 223–253). Hillsdale: Erlbaum.
- Mitchell, R. J., Cameron, C. M., McMaugh, A., Lystad, Reidar P., Badgery-Parker, T., and Ryder, T. (2021). The impact of childhood injury and injury severity on school performance and high school completion in Australia: a matched population-based retrospective cohort study. *BMC Pediatrics*, 21(426), 1–14.
- Moskovsky, C., Alrabai, F., Paolini, S., and Ratcheva, S. (2013). The effects of teachers' motivational strategies on learners' motivation: A controlled investigation of second language acquisition. *Language Learning*, 63(1), 34–62.
- Nanyoung, K. (2021). Determinants and Implications for Creativity Education in Korea: Policy Tools, Street-level Administration, and Implementation Conditions. *Korean Journal of Policy Studies*, 36(2), 71–88.
- NSW Education Standards Authority. (2021a, 14.05.21). *The Australian Professional Standards for Teachers (the Standards)*. Retrieved from <https://educationstandards.nsw.edu.au/wps/portal/nesa/teacher-accreditation/meeting-requirements/the-standards>
- NSW Education Standards Authority. (2021b). *Proficient Teacher Support Document: Examples of Practice at Proficient Teacher*. Sydney: NSW Education Standards Authority.
- NSW Government. (2020). *Response to the NSW Curriculum Review final report*. Sydney: NSW Government.
- NSW Government. (2021). *Schools Digital Strategy*. Sydney: NSW Government.
- Oxford, R. (2001). 'The bleached bones of a story': Learners' constructions of language teachers. In M. Breen (Ed.), *Learner contributions to language learning: New directions in research* (pp. 86–111). Harlow: Longman.
- Papi, M., and Abdollahzadeh, E. (2012). Teacher motivational practice, student motivation, and possible L2 selves: An examination in the Iranian EFL context. *Language Learning*, 62(2), 571–594.
- Parker, D. (2013). *Creative Partnerships in Practice: developing creative learners*. London: Bloomsbury.
- Powell, D. R., Diamond, K. E., Burchinal, M. R., and Koehler, M. J. (2010). Effects of an early literacy professional development intervention on head start teachers and children. *Journal of Educational Psychology*, 102(2), 299–312.
- Richter, K., and Herrera, R. (2017). Characteristics and pedagogical behaviours of good EFL instructors: The views of selected Southeast Asian and Mexican SLTE students. *RELC Journal*, 48(2), 180–196.
- Ryhammer, L., and Brolin, C. (1999). Creativity research: historical considerations and main lines of development. *Scandinavian Journal of Educational Research*, 43(1), 259–273.
- Smith, D., and Manuel, J. (2017). *Sydney Story Factory Final Evaluation Report*. Sydney: University of Sydney.
- UNESCO. (2021). *Pandemic-related disruptions to schooling and impacts on learning proficiency indicators: A focus on the early grades*. Montreal: United Nations Educational Scientific and Cultural Organisation Institute for Statistics.
- Wade-Leeuwen, B. (2016). *Out of the shadows: fostering creativity in teacher education programs*. Champaign: Common Ground Publishing.
- Wasik, B. A., and Hindman, A. H. (2011). Improving vocabulary and pre-literacy skills of at-risk preschoolers through teacher professional development. *Journal of Educational Psychology*, 103(2), 455.

## CHAPTER 4

- ACARA. (2021). NAPLAN 2021 SUMMARY RESULTS DATA. Retrieved from <https://www.acara.edu.au/docs/default-source/media-releases/20210813-naplan-results-med-rel.pdf>
- ACARA. (n.d.). Australian Curriculum. Retrieved from <https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/>
- Aram, D. (2010). Writing with young children: A comparison of parental and maternal guidance. *Journal of Research in Reading, 33*(1), 4–19.
- Aram, D., and Biron, S. (2004). Joint storybook reading and joint writing interventions among low SES preschoolers: Differential contributions to early literacy. *Early Childhood Research Quarterly, 19*(4), 588–610.
- Australian Council for Educational Research. (2019). PISA 2018: Australian students' performance. Canberra: Australian Council for Educational Research.
- Bahlmann Bollinger, C. M., and Myers, J. K. (2020). Young Children's Writing in Play-Based Classrooms. *Early Childhood Education Journal, 48*(1), 233–242.
- Bangert-Drowns, R., Hurley, M., and Wilkinson, B. (2004). The effects of school-based Writing-to-Learn interventions on academic achievement: A meta-analysis. *Review of Educational Research, 74*(1), 29–58.
- Barton, D. (2001). Directions for literacy research: analysing language and social practices in a textually mediated world. *Language and Education, 1*(1), 104.
- Berge, K. L. (2004). Writing culture. In K. L. Berge (Ed.), *Learning in the future*. Oslo: Norsk sakprosa.
- Bingham, G., Quinn, M., and Gerde, H. (2017). Examining early childhood teachers' writing practices: Associations between pedagogical supports and children's writing skills. *Early Childhood Research Quarterly, 39*(1), 35–46.
- Birnbaum, L., Schüller, E. M., and Kröner, S. (2020). Who likes to engage in writing? – The role of children's beliefs and intrinsic value regarding leisure writing. *Educational Psychology, 40*(7), 856–874.
- Bourke, L., and Adams, A. M. (2011). Is it difference in language skill and working memory that account for girls being better at writing than boys? *Journal of Writing Research, 3*(3), 249–277.
- Camacho, A., Alves, R. A., and Boscolo, P. (2021). Writing motivation in school: A systematic review of empirical research in the early twenty-first century. *Educational Psychology Review, 33*(1), 213–247.
- Cameron, C., and Moshenko, B. (1996). Elicitation of knowledge transformational reports while children write narratives. *Canadian Journal of Behavioural Science, 28*(4), 271–280.
- Carroll, J. M., Holliman, A. J., Weir, F., and Baroody, A. E. (2019). Literacy interest, home literacy environment and emergent literacy skills in preschoolers. *Journal of Research in Reading, 42*(1), 150–161.
- Cho, J.-R., and McBride, C. (2018). Maternal literate mediation of writing and Korean children's reading and writing across 1 year. *Reading and Writing, 31*(3), 679–701.
- Cordeiro, C., Castro, S. L., and Limpo, T. (2018). Examining potential sources of gender differences in writing: the role of handwriting fluency and self-efficacy beliefs. *Writing and Community, 35*(1), 448–473.
- Crato, N. (2021). *Improving a Country's Education*. Lisbon: Springer.
- De Naeghel, J., Van Keer, H., Vansteenkiste, M., and Rosseel, Y. (2012). The Relation between Elementary Students' Recreational and Academic Reading Motivation, Reading Frequency, Engagement, and Comprehension: A Self-Determination Theory Perspective. *Journal of Educational Psychology, 104*(4), 1006–1021.
- De Smedt, F., Van Keer, H., and Merchie, E. (2016). Student, teacher and class-level correlates of Flemish late elementary school children's writing performance. *Reading and Writing, 29*(5), 833–868.
- Diamond, K. E., Gerde, H. K., and Powell, D. R. (2008). Development in early literacy skills during the pre-kindergarten year in Head Start: Relations between growth in children's writing and understanding of letters. *Early Childhood Research Quarterly, 23*(1), 467–478.
- Eccles, J. S. (2005). Subjective task value and the Eccles et al. model of achievement-related choices. In A. J. Elliot and C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 105–121). New York: Guilford Press.
- Eccles, J. S., and Wigfield, A. (2002). Motivational belief, values, and goals. *Annual Review of Psychology, 53*(1), 109–132.
- Englert, C. S., Zhao, Y., Dunsmore, K., Collings, N. Y., and Wolbers, K. (2007). Scaffolding the Writing of Students with Disabilities through Procedural Facilitation: Using an Internet-Based Technology to Improve Performance. *Learning Disability Quarterly, 30*(1), 9–29.
- Ewing, R. (2015). Not for the faint-hearted: An Ethnographic Case Study Report on the Sydney Story Factory picture book workshop at National Centre for Indigenous Excellence. National Centre for Indigenous Excellence: Sydney.
- Fidalgo, R., Torrance, M., and García, J. (2008). The long-term effects of strategy-focussed writing instruction for grade six students. *Contemporary Educational Psychology, 33*(4), 672–693.

- Frederickson, N., and Tony, C. (2002). Special education needs, inclusion and diversity: A textbook. In. Buckingham: Open University Press.
- Frijters, J. C., Barron, R. W., and Brunello, M. (2000). Direct and mediated influences of home literacy and literacy interest on prereaders' oral vocabulary and early written language skill. *Journal of Educational Psychology*, 92(1), 466–477.
- Genlott, A., and Grönlund, A. (2013). Improving literacy skills through learning reading by writing: The iWTR method presented and tested. *Computers and Education*, 67(1), 98–104.
- Gerde, H., Bingham, G. E., and Pendergast, M. L. (2015). Environmental and teacher supports to writing in classrooms. *Early Childhood Research Quarterly*, 31(1), 34–46.
- Gerde, H., Bingham, G. E., and Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(1), 351–359.
- Graham, S., Berninger, V., and Fan, W. (2007). The structural relationship between writing attitude and writing achievement in first and third grade students. *Contemporary Educational Psychology*, 32(3), 516–536.
- Graham, S., Gillespie, A., and McKeown, D. (2013). Writing: Importance, development, and instruction. *Reading and Writing*, 26(1), 1–15.
- Graham, S., Harris, K., and Fink, B. (2000). Is handwriting causally related to learning to write? Treatment of handwriting problems in beginning writers. *Journal of Educational Psychology*, 92(1), 620–633.
- Graham, S., Harris, K., and Hebert, M. (2011). Informing writing: The benefits of formative assessment. Retrieved from Washington:
- Graham, S., Harris, K. R., and Santangelo, T. (2015). Research-based writing practices and the common core. *The Elementary School Journal*, 115(1), 498–522.
- Graham, S., McKeown, D., Kihara, S., and Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology*, 104(1), 879–896.
- Guo, Y., Justice, L. M., Kaderavek, J. N., and McGinty, A. (2012). The literacy environment of preschool classrooms: Contributions to children's emergent literacy growth. *Journal of Research in Reading*, 35(3), 308–327.
- Hidi, S., and Boscolo, P. (2006). Motivation and writing. In C. MacArthur, S. Graham, and J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 144–157). New York: The Guilford Press.
- Hsiao, Y., Banerji, N., and Nation, K. (2021). Boys Write About Boys: Androcentrism in Children's Reading Experience and Its Emergence in Children's Own Writing. *Child Development*, 00(0), 1–11. Retrieved from <https://srcd.onlinelibrary.wiley.com/doi/pdfdirect/10.1111/cdev.13623>
- Inoue, T., Georgiou, G., Maekawa, H., and Parrila, R. (2021). Cultural influences on the relationship between self-concept, interest, task-focused behavior, and reading skills. *Journal of Cultural Cognitive Science*, 5(1), 311–323.
- Jones, T. (2020). *A student-centred sociology of Australian education: Voices of experience*. Cham: Springer.
- Katzir, T., Lesaux, N. K., and Kim, Y. (2008). The role of reading self-concept and home literacy practices in fourth grade reading comprehension. *Reading and Writing*, 22, 261–276.
- Kikas, E., Pakarinen, E., Soodla, P., Peets, K., and Lerkkanen, M. (2017). Associations between reading skills, interest in reading, and teaching practices in first grade. *Scandinavian Journal of Educational Research*, 62(1), 832–849.
- Kirby, J. R., Ball, A., Geier, B. K., Parrila, R., and Wade-Woolley, L. (2011). The development of reading interest and its relation to reading ability. *Journal of Research in Reading*, 34(1), 263–280.
- Koster, M., Tribushinina, E., Jong, P. F., and van den Bergh, H. (2015). Teaching Children to Write: A Meta-analysis of Writing Intervention Research. *Journal of Writing Research*, 7(2), 249–274.
- Liberg, C. (2006). *How children learn to read and write* (2nd ed.). Lund: Studentlitteratur.
- Limpo, T., and Graham, S. (2020). The role of handwriting instruction in writers' education. *British Journal of Educational Studies*, 68(3), 311–329.
- Limpo, T., Vigário, V., Rocha, R., and Graham, S. (2020). Promoting transcription in third-grade classrooms: Effects on writing skills, composing, and motivation. *Contemporary Educational Psychology*, 61(1), 101856.
- Luke, A., and Peter, T. (1997). The social practices of reading. In S. Muspratt and A. Luke (Eds.), *Constructing critical literacies* (pp. 185–225). New Jersey: Hampton Press.
- Morphy, P., and Graham, S. (2012). Word processing programs and weaker writers/readers: A meta analysis of research findings. *Reading and Writing*, 25(1), 641–678.
- Ng, C., Graham, S., Liu, X., Lau, K.-L., and Tang, K.-Y. (2021). Relationships between writing motives, writing self-efficacy and time on writing among Chinese students: Path models and cluster analyses. *Reading and Writing, OnlineFirst*, 1–29.
- Nicholls, J. G. (1978). The development of the concepts of effort and ability, perception of academic attainment, and the understanding that difficult tasks require more ability. *Child Development*, 49(1), 800–814.
- Ong, W. (1982). *Orality and literacy: The technologizing of the word*. London: Methuen.
- Pajares, F., and Valiante, G. (1997). Influence of self-efficacy on elementary students' writing. *The Journal of Educational Research*, 90(6), 353–360.

- Polesel, J., Rice, S., and Dulfer, N. (2014). The impact of high-stakes testing on curriculum and pedagogy: a teacher perspective from Australia. *Journal of Education Policy*, 29, 640-657. Retrieved from <https://doi.org/10.1080/02680939.2013.865082>
- Puranik, C. S., and Lonigan, C. J. (2011). From scribbles to scrabble: Preschool children's developing knowledge of written language? . *Reading and Writing*, 24(5), 567–589.
- Rice, M. F., and Dunn, M. (2020). Supporting Children's Writing in Inclusive Classrooms With Arts-Based Strategies. *Teaching exceptional children*, 52(3), 147-156.
- Roskos, K. A., Christie, J. F., and Richgels, D. J. (2003). The essentials of early literacy instruction. *Young Children*, 58(2), 52–60.
- Roskos, K. A., Tabors, P. O., and Lenhart, L. A. (2009). Oral language and early literacy in preschool: Talking, reading, and writing Preschool literacy collection. Newark: International Reading Association.
- Ryan, R., and Deci, E. (2000). Intrinsic and extrinsic motivation: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54–67.
- Salas, N., and Silvente, S. (2020). The role of executive functions and transcription skills in writing: A cross-sectional study across 7 years of schooling. *Reading and writing*, 33(4), 877–905.
- Säljö, R. (2002). Challenges and e-temptations - IT and the school's learning culture. Stockholm: Prisma.
- Santangelo, T., and Graham, S. (2016). A Comprehensive Meta-analysis of Handwriting Instruction. *Educational Psychology Review*, 28(1), 225–265.
- Seddon, T. (2001). National curriculum in Australia? A matter of politics, powerful knowledge and the regulation of learning. *Pedagogy, culture and society*, 9(3), 307-331. Retrieved from <https://doi.org/10.1080/14681360100200127>
- Skar, G. B., Jolle, L., and Aasen, A. J. (2020). Establishing rating scales to assess writing proficiency development in young learners. *Acta Didactica Norden*, 14(1), 1-30.
- Skar, G. B., Lei, P.-W., Graham, S., Aasen, A. J., Johansen, M. B., and Kvistad, A. H. (2021). Handwriting fluency and the quality of primary grade students' writing. *Reading and Writing*. doi:10.1007/s11145-021-10185-y
- Smith, D., and Manuel, J. (2017). Sydney Story Factory Final Evaluation Report. Sydney: University of Sydney.
- Stevenson, H. W., Lee, S.-Y., Chen, C., Stigler, J. W., Hsu, C.-C., and Kitamura, S. (1990). Context of achievement: a study of American, Chinese, and Japanese children. Monograph of the Society for Research in Child Development, 55(1), i–119.
- Stevenson, H. W., and Stigler, J. (1992). *The learning gap: Why our schools are failing and what can we learn from Japanese and Chinese education*. Mandaluyong: Summit Books.
- Street, B. (1984). *Literacy in theory and practice*. Cambridge: Cambridge University Press.
- Tait, G. (2019). *Making Sense of Education*. New York: Cambridge University Press.
- Troia, G., Harbaugh, A., Shankland, R., Wolbers, K., and Lawrence, A. (2013). Relationships between writing motivation, writing activity, and writing performance: Effects of grade, sex, and ability. *Reading and writing*, 26(1), 17–44.
- Viljaranta, J., Kiuru, N., Lerkkanen, M., Silinskas, G., Poikkeus, A., and Nurmi, J. (2017). Patterns of word reading skill, interest and self-concept of ability. *Educational Psychology*, 37(1), 712–732.
- Viljaranta, J., Tolvanen, A., Aunola, K., and Nurmi, J. (2014). The developmental dynamics between interest, self-concept of ability, and academic performance. *Scandinavian Journal of Educational Research*, 58(1), 734–756.
- Walgermo, B. R., Foldnes, N., Uppstad, P. H., and Solheim, O. J. (2018). Developmental dynamics of early reading skill, literacy interest and readers' self-concept within the first year of formal schooling. . *Reading and Writing: An Interdisciplinary Journal*, 31(1), 1379-1399.
- Wasser, N. A. (2021). *Narrative as Writing and Literacy Pedagogy for Preservice Elementary Teachers : Giving Children and Teachers a Voice*. Boston: Brill.
- Wigfield, A., and Eccles, J. S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68–81.
- Wigfield, A., and Eccles, J. S. (2002). The development of competence beliefs, expectancies for success, and achievement values from childhood through adolescence. In A. Wigfield and J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 91–120). Michigan: Academic Press.
- Williams, G., Larkin, R., Coyne-Umfreville, E., and Herbert, T. (2019). The Effects of Planning and Handwriting Style on Quantity Measures in Secondary School Children's Writing. *Frontiers in Psychology*, 2019(June), 1-7.
- Wood, E. A. (2014). Free choice and free play in early childhood education: Troubling the discourse. *International Journal of Early Years Education*, 22(1), 4–18.
- Yarrow, F., and Topping, K. (2001). Collaborative writing: The effects of metacognitive prompting and structured peer interaction. *British Journal of Educational Psychology*, 71(2), 261-282.
- Zimmerman, B., and Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal*, 31(4), 845–862.

## CHAPTER 5

- ACARA. (2021). NAPLAN 2021 SUMMARY RESULTS DATA. Retrieved from <https://www.acara.edu.au/docs/default-source/media-releases/20210813-naplan-results-med-rel.pdf>
- ACARA. (n.d.). Australian Curriculum. Retrieved from <https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/>
- Almelhi, A. (2021). Effectiveness of the ADDIE Model within an E-Learning Environment in Developing Creative Writing in EFL Students. *English Language Teaching*, 14(2), 20-36.
- Amabile, T. M. (1988). A Model of Creativity and Innovation in Organizations. *Research in Organizational Behavior*, 10(1), 123-167.
- Amabile, T. M. (1990). Within you, without you: the social psychology of creativity, and beyond. In M. A. Runco and R. S. Albert (Eds.), *Theories of Creativity*. Cresskill: Hampton Press.
- Amabile, T. M. (1996). *Creativity in context*. Boulder: Westview Press.
- Anderson, N., Potočník, K., and Zhou, J. (2014). Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. *Journal of Management*, 40(5), 1297-1333.
- Atchley, R. A., Keeney, M., and Burgess, C. (1999). Cerebral hemispheric mechanisms linking ambiguous word meaning retrieval and creativity. *Brain and Cognition*, 40(1), 479-499.
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: Freeman.
- Barron, F. (1969). *Creative Person and Creative Process*. New York: Holt Rinehart and Winston.
- Bayat, S. (2016). The effectiveness of the creative writing instruction program based on speaking activities (CWIPSA). *International Electronic Journal of Elementary Education*, 8(4), 617-628.
- Bruning, R., Dempsey, M., Kauffman, D., McKim, C., and Zumbunn, S. (2013). Examining Dimensions of Self-Efficacy for Writing. *Journal of Educational Psychology*, 105(1), 25-38.
- Cartun, A., and Dutro, E. (2020). The Humanizing Potential of Risky Writing: Tracing Children's and Teacher Candidates' Critical-Affective Literacy Practices. *Reading Psychology*, 41(6), 583-604.
- Collard, P., and Looney, J. (2014). Nurturing Creativity in Education. *European Journal of Education*, 49(3), 348-364.
- Couger, J. D. (1995). *Creative Problem Solving and Opportunity Finding*. San Francisco: Boyd and Fraser Publishing Company.
- Csikszentmihalyi, M. (1990). *Flow: the psychology of optimal experience*. New York: Harper Perennial.
- Csikszentmihalyi, M. (2014). *The Systems Model of Creativity*. Dordrecht: Springer.
- Dawson, S., Tan, J., and McWilliam, E. (2011). Measuring creative potential: using social network analysis to monitor a learners' creative capacity. *Australasian Journal of Educational Technology*, 27, 924-942.
- Dobson, T., Stephenson, L., and De Arede, A. (2021). Disrupting Aetonomativity: Involving Children in the Writing of Literature for Publication. *English in Education*, 55(1), 4-19.
- Du, K., Wang, Y., Ma, X., Luo, Z., Wang, L., and Shi, B. (2020). Achievement goals and creativity: The mediating role of creative self-efficacy. *Educational Psychology*, 40(10), 1249-1269.
- Edwards, S. M. (2001). The technology paradox: efficiency versus creativity. *Creativity Research Journal*, 13(1), 221-228.
- Ewing, R. (2015). Not for the faint-hearted: An Ethnographic Case Study Report on the Sydney Story Factory picture book workshop at National Centre for Indigenous Excellence. National Centre for Indigenous Excellence: Sydney.
- Glăveanu, V. P. (2013). Rewriting the Language of Creativity: The Five A's Framework. *Review of General Psychology*, 17(1), 69-81.
- Graham, S., McKeown, D., Kiuahara, S., and Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology*, 104(1), 879-896.
- Grant, H., and Dweck, C. S. (2003). Clarifying achievement goals and their impact. *Journal of Personality and Social Psychology*, 85(1), 541-553.
- Guilford, J. P. (1950). Creativity. *American Psychologist*, 1(5), 444-445.
- Guilford, J. P. (1967). *The Nature of Human Intelligence*. New York: McGraw Hill.
- Halpern, D. (2013). *Thought and Knowledge: An Introduction to Critical Thinking*. New York: Psychology Press.
- Hui, A., and Lau, S. (2012). Formulation of Policy and Strategy in Developing Creativity Education in Four Asian Chinese Societies: A Policy Analysis. *The Journal of creative behavior*, 44(4), 215-235.
- Jones, T. (2020). *A student-centred sociology of Australian education: Voices of experience*. Cham: Springer.
- Karam, K. M., and Elfiel, H. (2021). An Experimental Appraisal of the Acquisition of Creative Literary Compression versus Descriptive Texts. *Creativity Research Journal*, 33(2), 106-123.
- Koster, M., Tribushinina, E., Jong, P. F., and van den Bergh, H. (2015). Teaching Children to Write: A Meta-analysis of Writing Intervention Research. *Journal of Writing Research*, 7(2), 249-274.

- Li, L. (2020). *Thinking Skills and Creativity in Second Language Education*. London and New York: Routledge.
- Limpo, T., Filipe, M., Magalhaes, S., Cordeiro, C., Veloso, A., Castro, S., and Graham, S. (2020). Exploring third graders reasons to write and their relationship with self-efficacy and writing skills. *Reading and Writing*, 33(9), 2173–2204.
- London, J. (2019). *Creativity and information systems: A theoretical and empirical investigation of creativity in IS*. Clemson: Clemson University.
- Lubart, T. I. (2001). Models of the Creative Process: Past, Present and Future. *Creativity Research Journal*, 13(3-4), 295–308.
- Lucas, B. (2016). A Five Dimensional Model of Creativity and its Assessment in Schools. *Applied Measurement in Education*, 29(4), 278-290.
- DOI: 10.1080/08957347.2016.1209206
- McCrae, R., and Costa, P. (1987). Validation of the five model across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81–90.
- Morphy, P., and Graham, S. (2012). Word processing programs and weaker writers/readers: A meta analysis of research findings. *Reading and Writing*, 25(1), 641-678.
- Mumford, M. D., Mobley, M. I., Reiter-Palmon, R., Uhlman, C. E., and Doares, L. M. (1991). Process Analytic Models of Creative Capacities. *Creativity Research Journal*, 4(2), 91–122.
- NSW Education Standards Authority. (2021, 14.05.21). *The Australian Professional Standards for Teachers (the Standards)*. Retrieved from <https://educationstandards.nsw.edu.au/wps/portal/nesa/teacher-accreditation/meeting-requirements/the-standards>
- Popović, D. (2021). Understanding and Applying Writing Strategies in Third Cycle of Primary School. *International Journal of Instruction*, 14(1), 963-982.
- Rhodes, M. (1961). An Analysis of Creativity. *The Phi Delta Kappan*, 42(7), 305–310.
- Runco, M. A., and Albert, R. S. (1986). The threshold theory regarding creativity and intelligence: an empirical test with gifted and nongifted children. *Creative Child and Adult Quarterly*, 11(212–218).
- Sahin, N., and Polatcan, F. (2019). The effect of creative writing exercises in Turkish classes on students' academic achievement: A meta-analysis. *International Online Journal of Educational Sciences*, 11(2), 254-268.
- Sawyer, K. (2012). *Explaining Creativity: The Science of Human Innovation*. New York: Oxford University Press.
- Seidel, S., Müller-Wienbergen, F., and Becker, J. (2010). The Concept of Creativity in the Information Systems Discipline: Past, Present, and Prospects. *Communications of the Association for Information Systems*, 27(1). Retrieved from <http://aisel.laisnet.org/cais/vol27/iss1/14>
- Shneiderman, B. (2000). *Creating Creativity: User Interfaces for Supporting Innovation*. *ACM Trans. Computer-Human Interaction*, 7(1), 114–138.
- Smith, D., and Manuel, J. (2017). *Sydney Story Factory Final Evaluation Report*. Sydney: University of Sydney.
- Sternberg, R. J., and Kaufman, J. C. (2010). Constraints on creativity: obvious and not so obvious. In J. C. Kaufman and R. J. Sternberg (Eds.), *The Cambridge Handbook of Creativity*. New York: Cambridge University Press.
- Taylor, C. L., Kaufman, J. C., and Barbot, B. (2021). Measuring Creative Writing with the Storyboard Task: The Role of Effort and Story Length. *Journal of Creative Behavior*, 55(2), 476-488.
- Torrance, E. P. (1974). *Tests of Creative Thinking: norms-technical manual*. Bensenville: Scholastic Testing Service.
- Ulu, H., and Yemenici, A. I. (2021). Creative writing exercises study in 1-8th grade Turkish textbooks. *African Educational Research Journal*, 9(2), 339-349.
- Utami, I. (2018). The effect of blended learning model on senior high school students' achievement. *SHS Web Conf*, 42(1), 27-33.
- Wallas, G. (1926). *The Art of Thought*. New York: Harcourt Brace and Company.
- Yarrow, F., and Topping, K. (2001). Collaborative writing: The effects of metacognitive prompting and structured peer interaction. *British Journal of Educational Psychology*, 71(2), 261-282.

