# Strengths approaches in early childhood mathematics education

Amy MacDonald
*Charles Sturt University*
<amacdonald@csu.edu.au>

Fiona Collins
*Charles Sturt University*
<fcollins@csu.edu.au>

Angela Fenton
*Charles Sturt University*
<afenton@csu.edu.au>

Steve Murphy
*Charles Sturt University*
<smurphy@csu.edu.au>

Matt Sexton
*Australian Catholic University*
<matthew.sexton@acu.edu.au>

Joce Nuttall
*Australian Catholic University*
<joce.nuttall@acu.edu.au>

James Russo
*Monash University*
<james.russo@monash.edu>

Toby Russo
*Bell Primary School*
<toby@bellps.vic.edu.au>

This symposium discusses the use of strengths approaches in early childhood mathematics education. *Strengths approaches* can be conceptualised as educational practices that recognise, and utilise, children's strengths. Strengths approaches originate in the social work sector, but are growing in recognition in early childhood education. This symposium considers how strengths approaches might be adopted in early childhood mathematics education, specifically, encouraging pedagogical approaches that recognise, and build upon, young children's strengths in mathematics. This symposium presents theorisation and a case illustration of how strengths approaches can be meaningfully utilised in early childhood settings in order to enhance mathematical learning opportunities for young children. The symposium addresses three aspects: (1) Overview of strengths approaches; (2) Application of strengths approaches; and (3) Leadership to promote strengths approaches; illustrated within the context of early childhood mathematics education.

The symposium format is as follows:

**Chair:** Amy MacDonald

**Paper 1:** Fiona Collins & Angela Fenton *An introduction to the strengths approach*

**Paper 2:** Amy MacDonald & Steve Murphy *A strengths approach to birth-to-3 mathematics education: The case of Banjo Childcare Centre*

**Paper 3:** Matt Sexton & Joce Nuttall *Leadership of strengths-based approaches for early years mathematics education: Using CHAT as a framework for educational leaders' professional learning leadership*

**Discussants:** James Russo & Toby Russo

2021. In Y. H. Leong, B. Kaur, B. H. Choy, J. B. W. Yeo, & S. L. Chin (Eds.), *Excellence in Mathematics Education: Foundations and Pathways (Proceedings of the 43rd annual conference of the Mathematics Education Research Group of Australasia)*, pp. 83. Singapore: MERGA.

# An introduction to the strengths approach

Fiona Collins
*Charles Sturt University*
<fcollins@csu.edu.au>

Angela Fenton
*Charles Sturt University*
<afenton@csu.edu.au>

This paper provides a foundation for the Research Symposium, "*Strengths Approaches in Early Childhood Mathematics Education"* by providing an overview of the development of strengths-based approaches in social work and education. A framework, adapted from the Strengths Approach (McCashen, 2017), for applying a strengths-based approach in early childhood mathematics education is introduced.

## An Overview of Strengths-Based Approaches

Strengths-based approaches, originally developed in social work practice and psychology (Glicken, 2004; Saleebey, 1996; Seligman, 1990), are gaining momentum as practitioners see applications in other human service fields such as education and health care (Pulla, 2017). Globally, there is a growing expectation that professionals working with children in their early years will adopt strengths-based approaches "to support the access and participation of all children and families, especially those with complex needs" (Fenton et al., 2015, p. 29). Furthermore, the Belonging, Being & Becoming: Early Years Learning Framework for Australia (EYLF) states that "in order to engage children actively in learning, educators identify children's strengths and interests" (DEEWR, 2009, p. 9) and extends this by explaining that "early childhood educators who are committed to equity believe in all children's capacities to succeed, regardless of diverse circumstances and abilities" (DEEWR, 2009, p.13). This paper provides an overview of strength-based approaches and then suggests a specific framework, adapted from the Strengths Approach (McCashen, 2017), for applying a strengths-based approach to support children in the early years in their learning of mathematics.

The development of strengths-based approaches in the 1980s and 1990s, alongside narrative therapies and solution-focused therapies, involved an entirely different approach to be adopted by professionals in human service practice (McCashen, 2017). Previously, therapy was pathology focused, where people and their problems were categorised according to diagnoses, behaviours and/or problems (McCashen, 2017); the focus was very much on what was wrong and as such has since been referred to as a deficit model. Later models shifted focus towards the specific circumstances of the client and the organisations around them available for support; the therapist was viewed as the "expert" and tasked with "fixing" the client in order to allow them to overcome their problem and return to a "normal" life (McCashen, 2017). However, these models raised concerns of imparting "power over" clients (McCashen, 2017, p. 54). In contrast, strength-based approaches are centred on the belief that all human beings are individuals who possess strengths, are experts of their own circumstances, and have the capacity for change if they are provided with opportunities and access to appropriate resources (Glicken, 2004; McCashen, 2017; Saleebey, 2009). Saleebey (2009, p. 97) states that "almost anything can be considered a strength under certain conditions," whilst McCashen (2017) goes further and defines strengths as

> anything people have that helps them to achieve, to overcome problems, to build on things that are already positive, to learn, grow, and be fulfilled. Strengths can be understood in terms of personal qualities – positive characteristics and things that people are good at. Strengths include people's skills and capacities, their aspirations and values and the resources in their environment. (p. 33)

2021. In Y. H. Leong, B. Kaur, B. H. Choy, J. B. W. Yeo, & S. L. Chin (Eds.), *Excellence in Mathematics Education: Foundations and Pathways (Proceedings of the 43rd annual conference of the Mathematics Education Research Group of Australasia)*, pp. 84-87. Singapore: MERGA.

In education contexts, strengths-based approaches can also present an alternate point of view (Fenton, 2013) that is in contrast to a deficits view of learning, where emphasis is placed on 'gaps' in a child's knowledge and/or skills, or identified learning problems, such as a focus on children with learning disabilities (see Harry & Klingner, 2007). For example, educators working from a deficit model design learning experiences to help children remediate "gaps" in knowledge and/or model skills which are not evident. MacDonald (2018) warns that adopting a deficit view of a child's mathematical capacity can lead to a perpetual cycle of negative expectations, which can lead to opportunities for mathematical learning being blocked, which can contribute to negative mathematical learning experiences, ultimately resulting in disempowerment.

Instead, strengths-based approaches require practitioners to look at "individuals, families, and communities … in light of their capacities, talents, competencies, possibilities, visions, values, and hopes" (Saleebey, 1996, p. 297). In essence, strengths approaches within education are student-centred, and focussed on measuring children's strengths, catering for individual children's needs, collaboration, and the deliberate application and intentional development of children's strengths (Lopez & Louis, 2009). Mathematics educators working with a strengths approach will focus on what mathematics children can do, as well as the opportunities and resources available to assist in the development of their strengths and capacities to meet identified learning goals. MacDonald (2018) described this process as a competency cycle, "a process of creating positive expectations and opening the way for the development of new competencies" (p. 144).

Whilst strengths approaches are being encouraged in early childhood education, a number of critiques of this philosophy have also been expressed, including: that it is simply another way of describing being positive, and/or a way of reframing deficits through ignoring or denying real problems (Saleebey, 1996). The strengths approach has also been criticised for being "overly simplistic and superficial" (Glicken, 2004, p. 14) and for being an ideological theology (Epstein, 2012). Glicken (2004) cautions strengths practitioners about the complexity of discovering and applying strengths and warns that it can be a time consuming process. Furthermore, there is the potential for educators and children to adopt fixed mindsets if practice is limited merely to the identification and affirmation of strengths, without the nurturing and development of new talents (Lopez & Louis, 2009).

## An Introduction to the Strengths Approach

Building on the foundations of strengths perspectives' origins in the United States, the Strengths Approach, was developed further in Australia by St. Luke's, a social services organisation based in Bendigo, Victoria, as a philosophy for collaborating with others in an effort to achieve a positive transformation (McCashen, 2017). St. Luke's sought to develop practice-based principles to guide their practical work with children and families. The approach "encourages the identification of resources and the use of challenges, as they occur, to create resilience and aptitude when working with issues" (Fenton et al., 2016, p. 46). A number of principles guided the development of the Strengths Approach, including: the dignity and capabilities of each person as their own change agent; the ability of each person to enact their own strengths and capabilities; the identification and mobilisation of resources to support development; and a collaborative sharing of power between all stakeholders (McCashen, 2017).

The Strengths Approach is a framework for practice that encompasses reflection, learning, planning, action and review. It is important to emphasise that the Strengths Approach not only looks at the positives. In fact, the approach generally starts from clearly

exploring a challenge, complex issue or need. The Column Approach (McCashen, 2017) is provided as a scaffold for applying a Strengths Approach in five steps. Practitioners are encouraged to consider with all stakeholders: (i) What is the challenge here? (ii) What is the ultimate goal/vision? (iii) What existing strengths and capacities can we utilise? (iv) What extra resources are available? (v) With the previous steps in mind – what is our plan of action? A table version of the Column Approach (Table 1) can be used by educators, to assist children in their early years to develop their mathematical knowledge, skills and understanding.

Table 1
*The Column Approach**

| Stories and issues | The picture of the future | Strengths and capacities | Other resources | Plans and steps |
|---|---|---|---|---|
| Ask questions that invite children to share their mathematical stories and enable them to clarify the challenges, such as:<br>• What's the mathematical challenge or problem?<br>• What's happening here?<br>• What are you trying to do?<br>• What have you discovered?<br>• Have you solved a problem, or overcome a challenge like this before? If so, can you tell me about it? | Ask questions that help children explore their mathematical aspirations, dreams, interests and goals, such as:<br>• What do you want to know/be able to do?<br>• What do you want to discover?<br>• Why do you want to overcome this mathematical challenge/solve this mathematical problem?<br>• What do you need to know?<br>• What will solving this allow you to do?<br>• What are you interested in? | Ask children questions that help them explore their strengths, as well as their mathematical capacities such as:<br>• What are you good at?<br>• What do you like doing?<br>• What do the special people in your life think you are good at?<br>• What were you thinking about when this happened?<br>• What do you know that might be helpful here?<br>• What have you done in the past when you have experienced similar mathematical challenges / problems? | Ask questions that help children to identify resources that might help them reach their mathematical goals, such as:<br>• Who else might be able to help?<br>• What other skills or resources might be helpful?<br>• What have people done already that has helped?<br>• Who or what has been helpful in the past when you have had mathematical challenges / problems like this? | Ask questions that help children to specify steps towards the achievement of their mathematical goals, such as:<br>• What are you going to do next?<br>• What information will you use?<br>• What skills and strengths will you use?<br>• Who will help? How will they help?<br>• What resources will you use?<br>• When will it be done? |

* Adapted from McCashen (2017) and MacDonald (2018).

## Implications

The Column Approach provides a "mind map" (McCashen, 2017, p. 97) for working with children to help them: develop a narrative of their opportunities for learning in mathematics; identify their mathematical hopes and dreams; consider their strengths and mathematical capacities; identify resources that are available to them; and map out a way for them to move forward. It is also recommended that a proactive first step for educators is to

identify what they do well (for example pedagogical approaches, resource development, leadership etc.) and ensure that they continually model and refine these strengths as they work with children to help them recognise and utilise their own strengths in the learning process and environment (Lopez & Louis, 2009). In this way, drawing on its social service and psychological origins, and particularly guided with a Column Approach, the Strengths Approach can be a practical collaborative framework for acknowledging children's mathematical curiosity and challenges, honouring their existing mathematical knowledge, and importantly drawing on their strengths and mathematical capacities as their learning develops.

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