Narratives of Young Gifted Children

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ABSTRACT

This article shares narratives, or learning-informed stories, of young gifted learners. The purpose of the article is to document exceptionalities of the youngest gifted learners, supporting advocacy, and to demonstrate the merit of narrative approaches to assessment. Narrative assessment, including learning stories, is particularly useful for supporting a multi-categorical concept of giftedness, and can be linked to other assessment and curriculum initiatives. Narrative assessment provides a practical approach for teachers, allowing them to be visible and engaged in assessment across the curriculum. This article begins with background to giftedness and description of learning stories. The methodology of the study is reported, followed by examples of narratives of young gifted children. The article then concludes with a discussion of curriculum connections.

Practice paper

Keywords: *Gifted, learning stories, narrative assessment*

BACKGROUND

Francoys Gagne (1995) affirms that giftedness can be displayed at a young age, and that in time, through volition and environment, talent may develop. Government and Ministry of Education initiatives in New Zealand for gifted and talented education have continued to marginalise the early childhood education sector. The most recent government-funded professional development contract (Roy, 2010) continues this trend by explicitly excluding provision to teachers in the early childhood education sector, although there most certainly are gifted children under the age of five years.

LEARNING STORIES

The broad heading of "narrative assessment" describes the approach to gathering authentic accounts of student learning in relation to the curriculum. The assessment approach is ipsative rather than normative; this approach supports teachers to "notice the progress of an individual student rather than comparing his or her achievement to that of others ... see for

example Te Kete Ipurangi, Assessment 2, Gathering Information, at www.tki.org.nz/r/assessment/two/index_e.php" (Ministry of Education, 2009, p. 6). Learning stories are one example of narrative assessment, developed by Margaret Carr (2001), with exemplars made available through the Ministry of Education (2004/2005/2007, retrievable on http://www.educate.ece.govt.nz/learning/curriculumAndLearning/Assessmentforlearning/KeiTuaotePae.aspx; 2009, retrievable on http://www.inclusive.org.nz/throughdifferenteyes/home2).

Learning stories vary enormously in presentation, tone, style and format. Some key elements include: the narrative and photographs; analysis of the significance of the narrative; consideration of 'where to next' or possible pathways for learning. Learning stories may bring to the fore curriculum achievement areas and goals, dispositions or key competencies, and aspects of effective pedagogy. Learning stories are most effective when they are connected to previous learning experiences and inform future teaching and learning, rather than being static snapshots.

Learning stories:

- make learning visible
- support teachers to notice, recognise and respond to learning and learners
- value and foster the learner's progress and achievement
- include multiple voices (parent, child and peer)
- recognise that learning is socially mediated and co-constructed
- do not compare students to others, or to standards (Ministry of Education, 2004).

A key difference between learning stories as an ipsative assessment approach, and norm-referenced approaches, is that learning stories are learner-centred rather than standards-centred; and comparisons are focused on the individual learner across time and context rather than between individuals. Another key point is that the teacher is part of the narrative, embedded in the assessment through interaction with the learner, rather than merely administering a formal assessment. Learning stories can by written by

parents, teachers, teacher-aides, RTLB, students themselves, and a range of support personnel. The teacher, however, plays a key role in connecting the learning stories to curriculum planning.

METHODOLOGY

The aim of the study is to collect and share formal or informal stories of exceptionality, and the learning of exceptional young learners. The narratives shared in this article are authentic, from teachers or parents of children enrolled in either of two early childhood services, drawn from research with four early childhood services during 2009 and 2010. These early childhood services were recruited because of interest amongst staff in young gifted children, and because the staff had expertise in writing learning stories. The researcher worked with teachers to gather learning stories suggested by staff as exemplifying characteristics of giftedness, particular learning dispositions, or 'wow' moments. In some centres, on request, the researcher provided some professional development around concepts of giftedness or the writing of learning story narratives.

The study has full ethics approval through the Massey University Human Ethics Committee. Consent for the use of the narratives, including images, has been provided from both parents and teachers. All of the names used in this article are pseudonyms.

NARRATIVES

Narratives are stories; people have always told stories amongst each other. Narratives about learning share information about the learner, the learning experience, social values and expectations. Narratives do not claim to be impartial or statistically reliable, and subjectivity should not be seen as a limitation. Narrative assessment allows teachers to be active within assessment; their voice, values and context of the story-teller are important parts of understanding the learner and learning.

Documenting gifted behaviour

Several characteristics of young gifted children were identified within the learning stories as a result of reflective analysis of narratives and learning stories, and discussion with the teachers who wrote them. The characteristics were identified either because they occurred frequently, were powerful, or connected to gifted education literature. The characteristics include: questioning; having advanced knowledge; expressing creativity; having particular skills, for example early literacy; memorisation; inquiry; intense observation, and naturalistic intelligence (Gardner, 1993).

Questioning

Sam's mother documented several narratives about the questioning of Sam, aged 3:09. Of course young children are notorious for their questioning nature (Why? Why?), however Sam's questions were focussed on a specific area of interest: "How do trees get water?" "Why are trees bushy?" "Why are some trees deciduous?" "Why is 'photosynthesis' such a long word?"

His mother reports: "I asked Sam: 'Why did you ask me about trees?' and he said, 'Because I didn't know about that, and I wanted to know.'" Sam's mother found the book I Wonder Why Trees Have Leaves at his early childhood education service, and showed it to Sam. As he read (without help) "his eyes lit up as he realised this book would give him some answers."

Demonstrating knowledge

Children at an early childhood education session were given toothpicks and marshmallows, and a small demonstration on how to create multi-sided 3-dimensional shapes. Children created pyramids, prisms, cubes, pentagons and octagons, then attempted dodecahedrons and other shapes. On the way home in the car, Xavier (4:08) dismantled his shapes and produced a replica of the solar system with his toothpicks and marshmallows, including (correctly) the major moons for each planet. A few weeks later he announced that he was going to build the solar system again, but with the space probes/man-made satellites that belonged to the planets, as he'd already done the moons before. Figure 1 provides a picture of Xavier's second solar system construction; his explanation is below.

This is a picture of the planets with man-made satellites and some moons. If you start on the right hand side and work your way over to the left, we start with the sun, then Mercury, then Venus – the marshmallow out of those represents Mariner 10, the first space probe to do flybys of the planets. Next the one with heaps out of it is earth, but there wasn't room to put any more although there are heaps of satellites flying around the earth, but the white one on its own is the moon. Next is Mars and Phobos and Demios and Space Probe Pathfinder, then Jupiter with its four main moons and Voyager, then Saturn with the Saturn Cassini and Voyager 2, then Uranus and Neptune with Voyager 2, and Pluto with Charon. When the model was made Voyager 2 hadn't reached Pluto yet, but it has now.

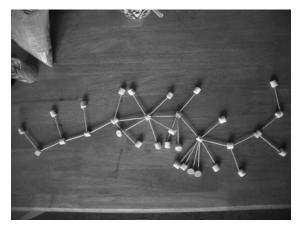


Figure 1: Solar system

Creativity

One generic view of creativity is application of knowledge in new and novel ways. Xavier (4:08) applied his knowledge about space in creative ways through drama. In one early childhood education service other children did not want to join in with a game he created about planets, but he was able to involve others in a specific childrens' drama group. The following commentary describes his play:

There are 10 people in the play, one for each planet, and I'm including Pluto, even though it's a dwarf planet. One person has to be the sun, but they don't get to move, because the other people will be orbiting around them. Everybody in the play will be wearing hula hoops of different colours, the same as the planets, so the people not in the play will know which planet is which and we will sing my planet's song.

This narrative also shows Xavier's awareness of others: both the participants in the play and the audience.

Skill: Precocious reading

Many young gifted children are early readers, and others master a range of different skills precociously. Significant aspects of precocity are early onset of competency and mastery without having been explicitly taught. In a doctoral study (Margrain, 2005), 11 precocious readers were studied, aged between 4:01 to 4:10, who had begun to read around the age of three years. Reading fluency was up to 12/13 years, accuracy was 7-10 years, and comprehension was consistently several years ahead of chronological age. None of these early readers had been explicitly taught to read by parents or teachers (Margrain, 2005). While reading is an individual skill achievement, narratives can show social interaction and application of the skill. Hannah's mother wrote:

Hannah loves her books and reading to others; sometimes she will read to the babies while they are playing. She [also] likes to spend quiet time by herself reading a book and sometimes she asks her teachers if she can read their special books.

Memorisation

The following narrative, written to Jeremy (2:07) by his mother, and included as documentation of learning in his early childhood education assessment portfolio, illustrates an example of his recall and memorisation:

One night at bedtime you correctly recalled a series of nine objects from your Gymbaroo classes: car, aeroplane, bus rocket, train, boat, helicopter, scooter, toes. We were amazed you could do this, because there had been one new word each week for nine weeks; we had missed some classes and no-one had told you the words in order.

Inquiry

Exploration is a specific strand of the early childhood curriculum Te Whāriki (Ministry of Education, 1996). However, young gifted learners appear to engage in more systematic inquiry, with more intense observation and insightful discovery. While 'transformers' may, for many children and adults, represent a recent movie or popular toy, to other children in the study it represented electrical transformers, for example on power lines. For these children, the opportunity to explore and investigate with electrical construction kits supported this particular interest.

Intense observation

Jeremy's mother narrated an incident illustrating his close observation and reflective thinking:

One morning Jeremy came to us with great excitement and announced. "Hey, my clock has a dot missing. Last night it said 'dot-seven-dot-dot-zero-zero', and now the dot has gone to someone else's clock where it's night-time." He knew there was a dot on his digital display to depict "pm" and that this vanished in the morning. He was relating the missing dot's whereabouts to his knowledge that when it is daytime in our country it is night-time in other countries on the other side of the world.

In this narrative the parent not only told Jeremy's story, there was also interpretation and analysis.

Continuity and connectedness

Searching across narratives for connectedness and continuity of interest (Carr, 2004), learning schema, dispositions (Carr, 2001) or key competencies (Ministry of Education, 2007) enables teachers

to ensure that narrative assessment is more than anecdotal scrapbooking. Documenting evidence across time can assist teachers to consider the depth and breadth of children's strengths and interests.

The images below record a narrative of Daniel's intense close observation; the images illustrate continuity over time of his use of tools and artefacts to enrich his scrutiny of his world. The images include him having crawled inside a barrel in order to take a photograph through a small hole in the barrel, intently examining a print-out of his own photos, using a magnifying glass and a viewfinder.





Jamie's portfolio records continuity in his dramatic play. In his drama he was a horse called Henry. He maintained play-acting of this role for many months, then wrote a book titled *A Horse Called Henry*, shared it with the class, and with relatives overseas via email. Is this necessarily giftedness? Perhaps most children have moments where they share things with confidence. However, for Jamie, the point is his intensity of enacting his drama, and sustaining it for a significant period of time.

Narrative assessment ensured this was documented and dated, giving evidence of continuity.

Anyone who was to look at Charlotte's portfolio would see narrative after narrative recording her passion for flowers and other plants. Stories of growing, watering, rescuing and naming plants abound. Clothing and art are adorned with flowers across years. There is even a narrative describing how when she was a baby she gestured to be held out over flowers. The frequency, intensity and continuity over several years indicate that Charlotte has a strong passion and naturalistic intelligence.





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CURRICULUM CONNECTIONS

The early childhood curriculum, *Te Whāriki* (Ministry of Education, 2006) has always woven principles (empowerment, holistic development, family and community, and relationships) and strands (belonging, well-being, communication, exploration, and contribution) rather than skills and achievement levels. The recently revised *New Zealand Curriculum* (Ministry of Education, 2007)

demonstrates a shift in the school curriculum, away from a singular focus on essential learning areas (such as English, Maths and Science), and toward more holistic approaches (including values, and key competencies such as relating to others and belonging). Teachers in the school sector increasingly consider socio-cultural interactions, student self-reflection, making learning visible through portfolios and explicit learning intentions, and re-visiting learning. Learning stories provide a useful approach within which dispositions for learning (Carr, 2001) and key competencies (Ministry of Education, 2007) can be documented. Although learning stories are most well-known in early childhood education, narrative assessment is also evident in schools in a range of ways, such as interviews, portfolios, self- and peer-assessment (Margrain & Clements, 2007).

Both *Te Whāriki* and *The New Zealand Curriculum* have broad, holistic visions, and aim to ensure confident, connected, lifelong learners. Using learning stories across both sectors can enhance connectedness across sectors, benefitting students and teachers. Connections have been acknowledged with research on transition across early childhood and school settings using learning stories as a common assessment tool, in both New Zealand (Carr, 2001; Ministry of Education, 2004/2005/2007), and internationally (EASE Group, 2010).

In 2009, the Ministry of Education released the Narrative Assessment: A guide for teachers and exemplars of learning stories for learners with special education needs (Ministry of Education, 2009 - see www.inclusive.org.nz/ throughdifferenteyes). The guide to narrative assessment outlines how to: use learning stories in classroom settings; begin to write learning stories, and analyse learning stories to illustrate learning over time. The learning story exemplars were written by teachers in primary and secondary schools, including regular classroom teachers who wrote learning stories for all children in their classrooms as a regular assessment practice. This special education initiative has the potential to be equally powerful for gifted learners. For example, in special education a learner may work within Level One of the curriculum for up to 16 years; learning stories can enable the teacher to document progress within a level rather than only between levels. A learning story may equally enable a teacher to document depth and breadth within a level for a gifted learner. Finding synergies between special education, gifted education, and education for all learners, rather than competing for resources, has the most likely potential for success. Nevertheless, gifted learners are particularly vulnerable as teachers have limited experience of noticing, recognising and responding to their specific learning abilities (Porter, 2005). These learners are, however, as deserving of all children in having their competencies documented and informing planning.

The Ministry of Education advocates that a teacher considers a range of assessment information when making overall teacher judgements about learners (Harwood, 2010). Learning stories can usefully contribute to that professional reflection on student learning. This is particularly important for aspects of the curriculum for which few other assessment methods are available. How else might Charlotte's naturalistic intelligence, Daniel's observational skills or Xavier's creativity be documented? A multi-categorical approach to giftedness values a range of gifts, including musical, artistic, leadership and cultural. Therefore, it is important that we challenge ourselves to look beyond traditional academic assessment approaches such as pen and paper tests.

CONCLUSION

The narratives shared in this presentation affirm that children under the age of five years can certainly be gifted, and we need to find ways to record their competencies. Narrative assessment, including learning stories, is especially useful for documenting non-traditional areas of the curriculum, and can effectively show continuity and progress over time. Learning stories can be as applicable and useful for the school sector as for early childhood education. However, given the increasing alignment between teacher practice, professionalism and curricula across sectors, it is disappointing that government initiatives for gifted education currently exclude early childhood education.

The range of characteristics described in this article is not presented as a list from which identification of giftedness can occur. It could be the breadth of many characteristics or the intensity and depth of a few particular characteristics that suggests giftedness. Any single narrative is unlikely to confirm giftedness; however parents and teachers can review documentation for evidence of intensity, continuity and connectedness across time for evidence that support potential identification or the need for additional assessment. Strength of narrative assessment also includes the opportunity to include meaning-making and context within the story-telling. Diverse communities can more easily bring aspects that are valued to the fore, such as cultural, artistic and naturalistic gifts.

Czikszentmihalyi (1996) wrote that "practically every individual who has made a novel

contribution to a domain remembers feeling awe about the mysteries of life and has rich anecdotes to tell about efforts to solve them" (p. 156). Teachers and parents have a critical role in ensuring that young children sustain their awe from Sam's questioning to Charlotte's passion for nature. We need to ensure we can document young children's competencies in broad, multicategorical domains, including interpersonal interactions and non-academic areas. Learning stories, as a method of narrative assessment, provides a credible approach to both document and advocate for young gifted learners. Further, learning stories allow teachers, parents and whānau to contribute to assessment, and support curriculum connections between early childhood and the school sector.

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Dr Valerie Margrain has been a lecturer in early years education at Massey University since 2008. She has formerly taught in primary school classrooms, as a Reading Recovery teacher, as an itinerant special education teacher, in playcentres, and at a range of tertiary education providers. Valerie's research interests include assessment, early literacy, gifted and inclusive education and parents. She is keen to hear from any readers who would like to share further narratives of young gifted learners.

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