THE IMPACT OF THE ENVIRONMENT ON CHILDREN'S LANGUAGE

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CAN THE ENVIRONMENT REALLY MAKE A DIFFERENCE?

Introduction and context

- Research question:

What constitutes a quality learning environment with regards to speech and language development for young children and how do factors in the learning environment influence the quality of utterances made by young children?

- Study aim:

 To ascertain if factors in three different learning environment types for children aged 3-5 years, are associated with the quality of their utterances and if so, the nature and effects of those factors.

In other words:

Does the quality of the learning environment have an impact on children's speech and language development?
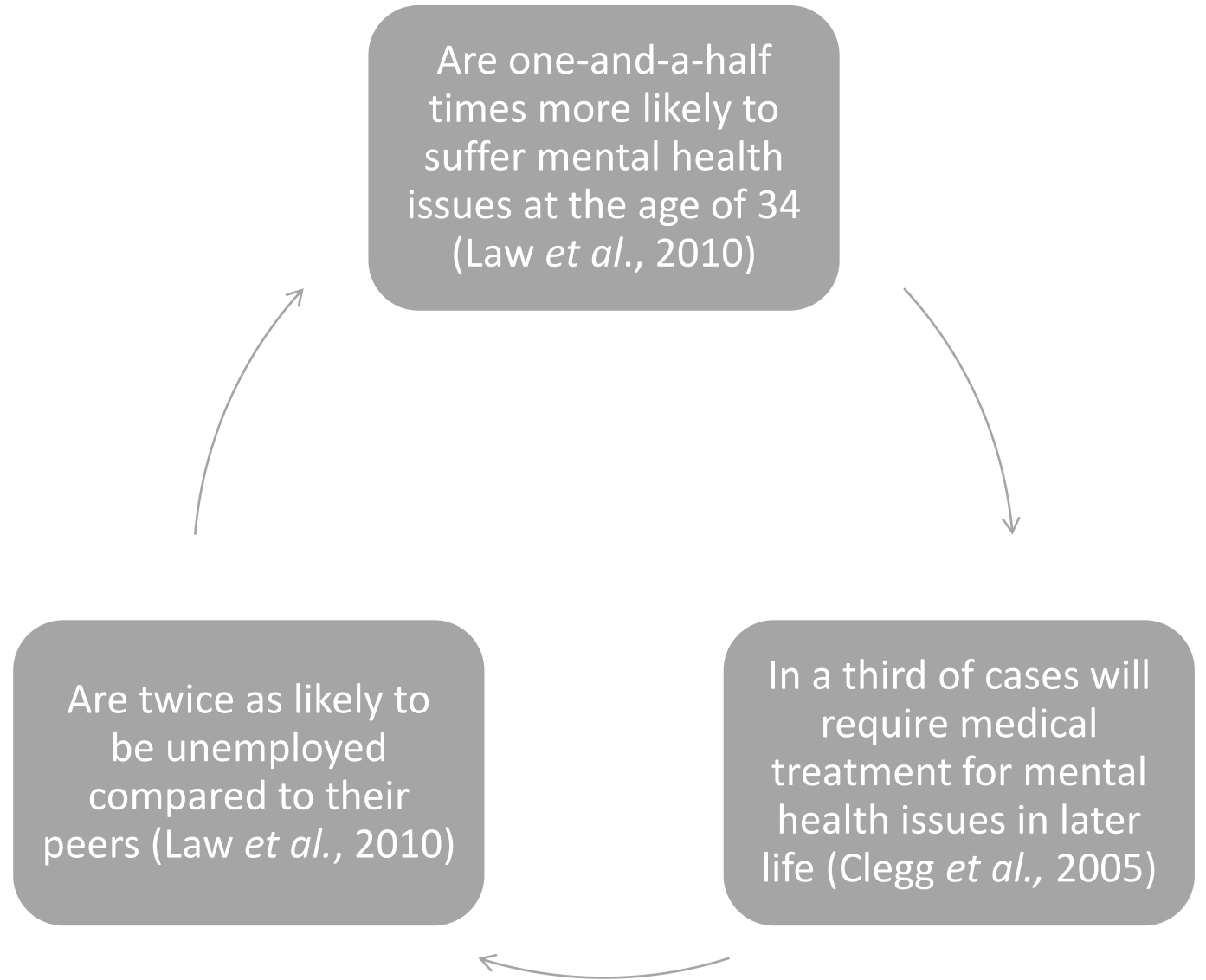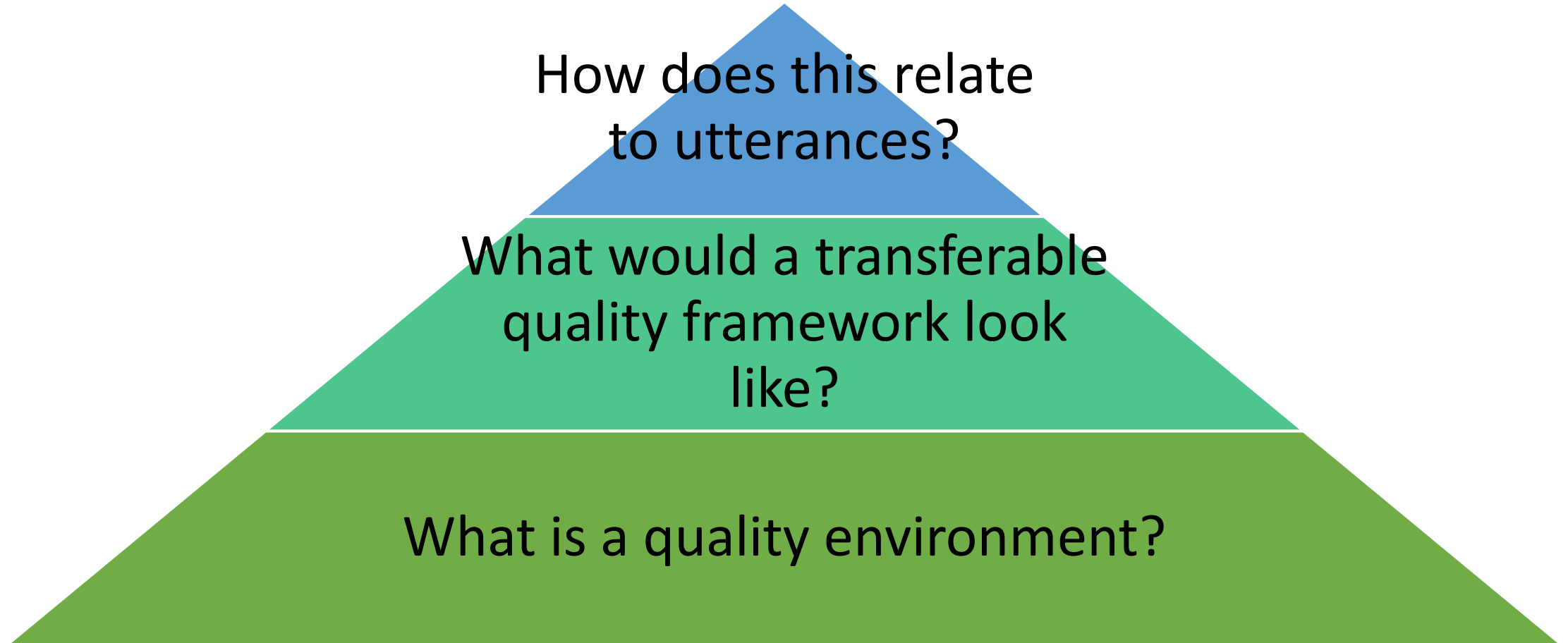
Previous research findings

- Speech and language improved by being in a natural environment (forest school) (Richardson, 2014)

- Children's utterances varied dependant on the environment that they were playing/learning in (Richardson and Murray, 2016)

- Currently available ratings scales were not transferable between indoor/outdoor/natural play and learning environments (Richardson and Murray, 2016)

Phased approach

Philosophical approach

- Transcendental idealism (Kant, 1781)

- A priori – aspects which can be seen or measured
- A posteriori – intuition, that which is "felt"

Phase 1: What does the literature say about quality?

- How is quality defined?

      Quality in early childhood services is a constructed concept, subjective in nature and based on values, beliefs and interest, rather than an objective and universal reality. Quality child care is, to a large extent, in the eye of the beholder.

(Pence and Moss, 1994:172)

And......

- Reed (2012) states that quality is defined by individuals' perspectives and beliefs, but also by an individual's positionality.

- Katz (1994:201) asserts that this 'insider' and 'outsider' view is necessary and that children's voices should be sought to define quality.

- Gosling (2016:31) believes that the concept of quality will depend on 'an intricate web of interconnected beliefs and experiences' and is often based on personal views of childhood.

- Brownlee and Berthelsen (2006) state that environment and the quality of such will also reflect practitioners understanding of child development.

- Unesco (2015) advocate the need for a quality environment to 'reflect local values and perspectives on young children's development, as well as scientifically established predictors of their cognitive, language and socio-emotional development'.

In line with Kant's theory of transcendental idealism…..

- 'We understand the concept of quality when we experience it, but when asked to describe a quality experience, explanations are very personal and subjective.' (Canning, 2012:78)

- Williams (1995) goes so far as to say that quality is a sensory concept and is something that can be felt, seen or heard.

- Berris and Miller (2011:105) found that parents reported a 'general feeling' about the quality of the physical environment, and reported that it was important to feel a 'connection' to their surroundings.

Existing rating scales

ECERS

Early Childhood Environment Rating Scale

(Harms *et al.*, 2005)

Most widely used rating scale (Sakai *et al.*, 2003)

Found not to be transferable between different environments (Richardson and Murray, 2016)

POEMS

Preschool Outdoor Environment Measurement Scale

(Hestenes *et al.*, 2004)

Large emphasis on interactionism (21 of 56 items are based on interaction with teacher/caregiver)

Purely for use in the outdoors.

CLASS

Classroom Assessment Scoring System

(Pianta *et al.*, 2008)

Concentrates purely on interactions.

Although this element is important this research is looking at more than just interactions

Phase one methods

- Semi structured interviews undertaken to ascertain perspectives of quality with an emphasis on speech and language development

- 63 participants included parents, practitioners, children and "experts".

- Thematic analysis using NVIVO found three themes:

Resources

Environment

Atmosphere

Resources

Provocations

Mark making materials

Natural resources/wildlife

Promoting physical activity

Sensory items/messy play

Variety of resources

Familiar/real life experiences

Transportable resources

Encourage development

Opportunity for collaboration

Books

Environment

- Quiet areas
- Accessibility
- Access between indoors/outdoors
- Singing area
- Space
- Safe
- Adequate risks/boundaries
- Uncluttered/appropriate amounts
- Prompts imagination
- Space to talk and discuss

Atmosphere

Acoustics

Freedom

Time

Supportive environment

Child led/follows children's interests

How does the environment feel?

Transferable Quality Rating Scale (TQAF)

TQAF devised and applied to different environments within four settings within different demographic areas
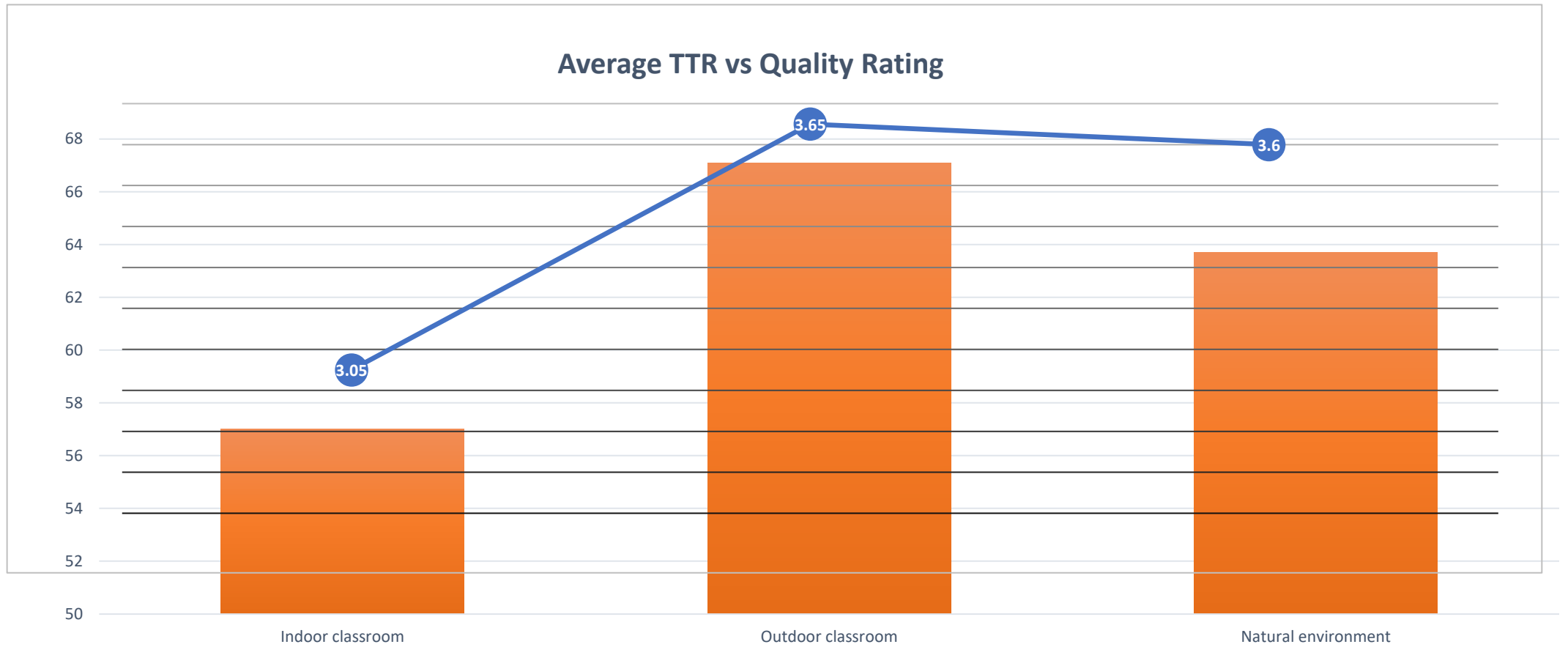
Alongside the TQAF, recordings of 43 children's speech taken and analysed using Type Token Ratio (TTR) analysis
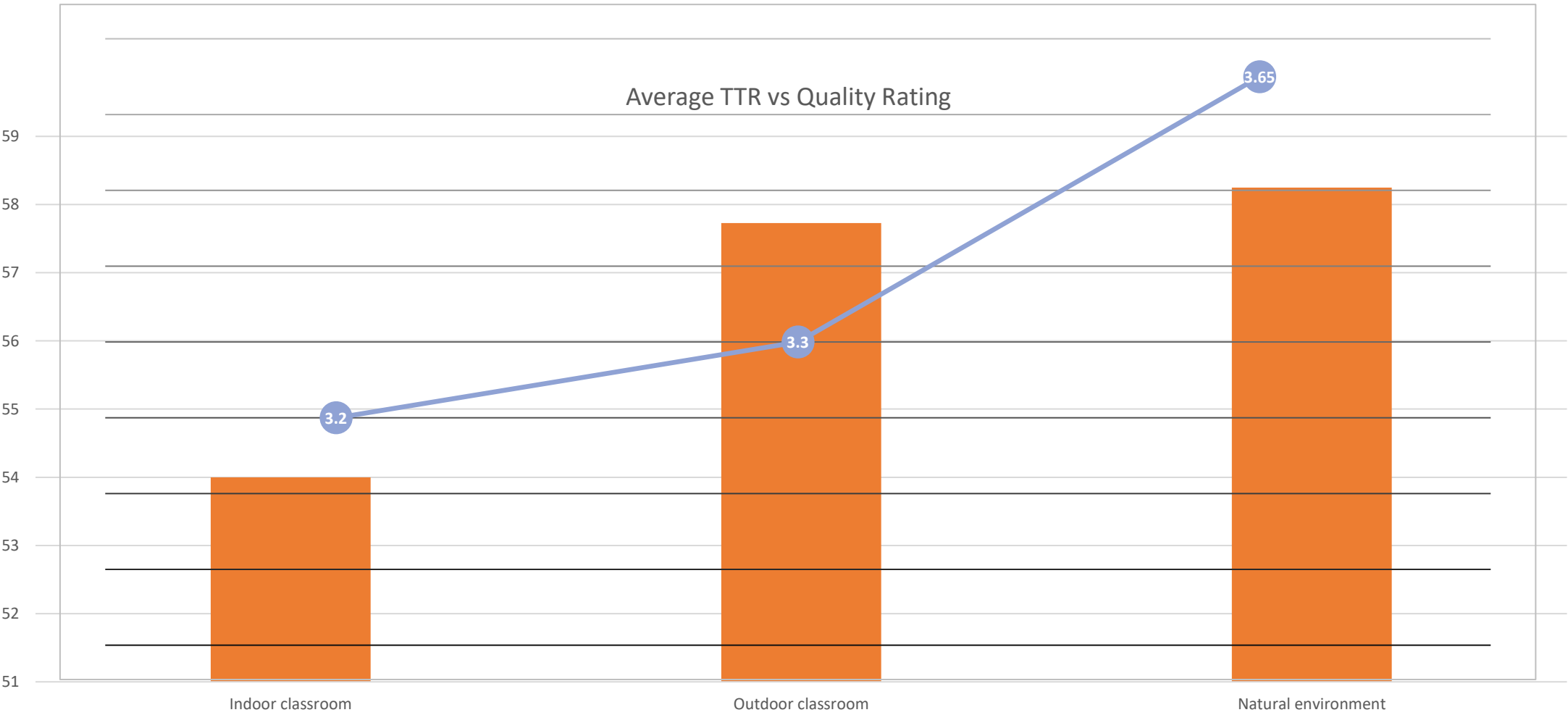
Comparison of the quality of the environment (via TQAF) and the quality of the speech (via TTR) then made.
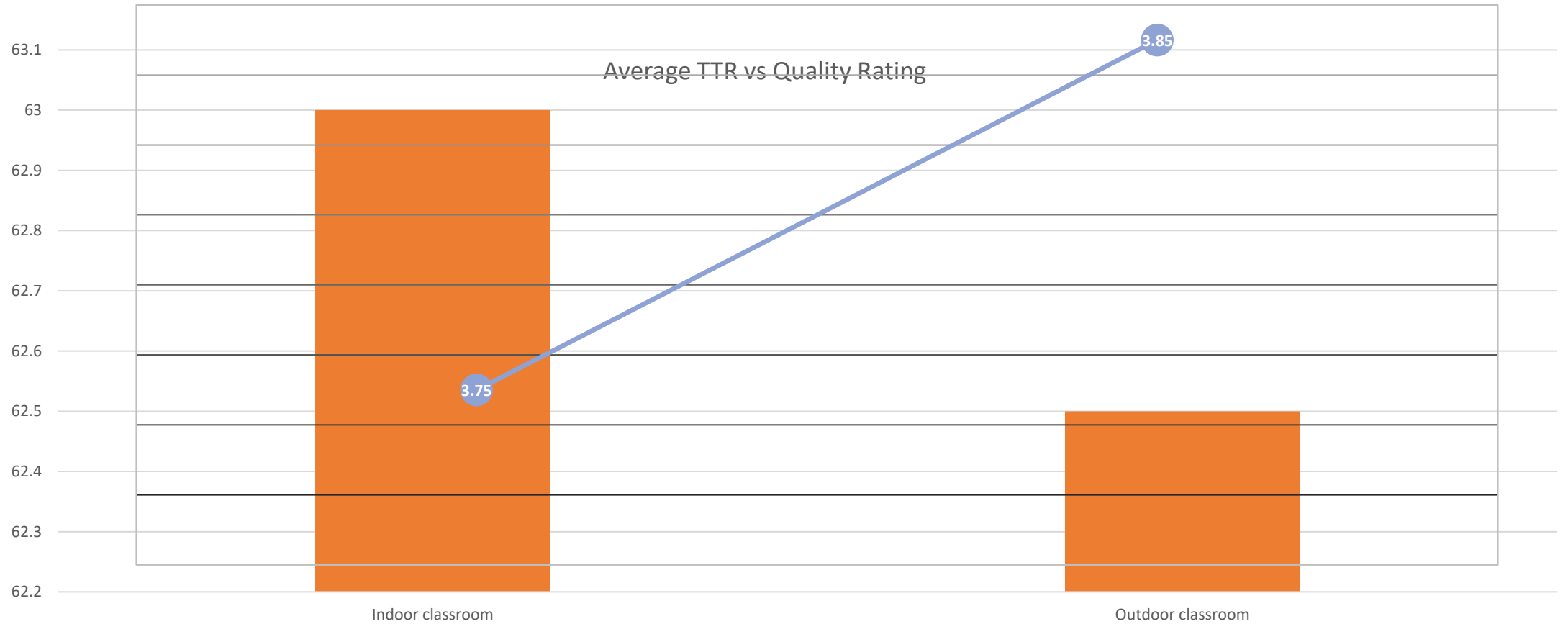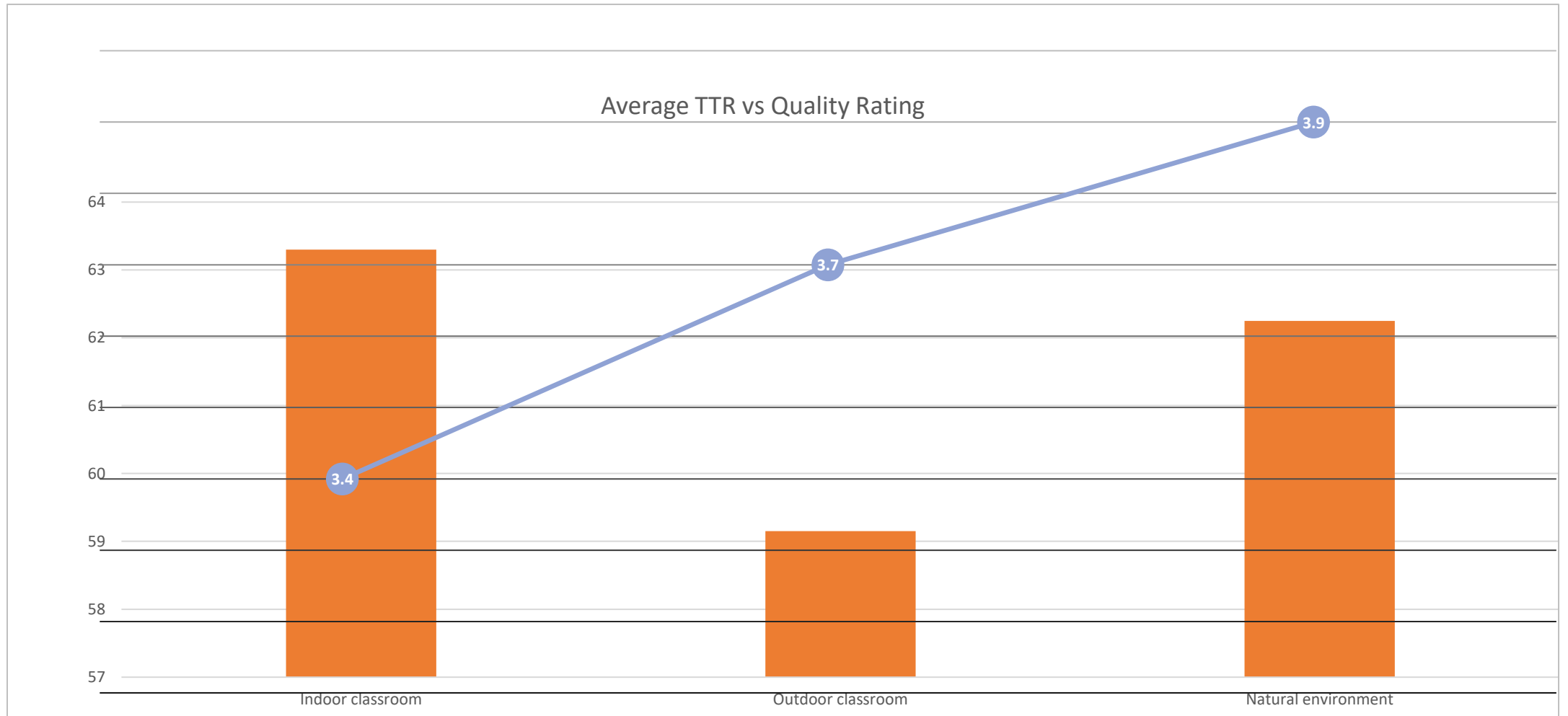
Setting one

Average TTR vs Quality Rating

Setting four

Average TTR vs Quality Rating

Setting three

Average TTR vs Quality Rating

Setting two – the anomaly!

Overall conclusions

- There appears to be a correlation between the quality of the environment and the quality of young children's speech.

- Where possible children should be able to select the environment in which they play and learn.

- Interactions remain an important aspect of how language is enhanced and should not be disregarded when analysing an environment.

It is not enough to give a child wings..

We have to help them to fly!

References (1)

- Berris, R. and Miller, E. (2011) How design of the physical environment impacts on early learning: educators' and parents' perspectives. *Australassian journal of early childhood.* **36**(4), pp.102-110.

- Brownlee, J. and Berthelsen, D. (2006) Personal epistemology and relational pedagogy in early childhood teacher education programs. *Early years.* **26**(1), pp.17-29.

- Canning, N. (2012) Exploring the concept of quality play. In: Reed, M. and Canning, N. (eds.) *Implementing quality improvement and change in the early years.* London: Sage Publications.

- Clegg, J., Hollis, C., Mawhood, L. and Rutter, M. (2005) Developmental language disorders – a follow up in later adult life. *Journal of psychology and psychiatry.* **46**(2), pp.128-149.

- Gosling, A. (2016) Quality early years environments. In: Slaughter, E. (ed.) *Quality in the early years.* London: Open University Press.

- Harms, T., Clifford, R. and Cryer, D. (2005) *Early childhood environment rating scale*. New York: Teachers College Press.

- Hestenes, L., DeBord, K., Moore, R., Cosco, N. and McGuinnis, J. (2005) Preschool Outdoor Environment Measurement Scale (POEMS). Winston Salem: Kaplan Company.

References (2)

- Kant, I. (1781) Translated by Puhar, W. (1996) Critique of Pure Reason. Indiana: Hackett Publishing Company.

- Katz, L. (1994) Perspectives on the quality of early childhood programs. Phi Delta Kappan, 76(3), pp.200-205.

- Law, J., Rush, R., Schoon, I. and Parsons, S. (2010) Modelling developmental language difficulties from school entry into adulthood. *Journal of speech, language and hearing research*. **52**(1), pp.1401-1416.

- Pence, H. and Moss, P. (1994) Towards an inclusionary approach in defining quality. In Moss, P. and Pence, M. (eds) *Valuing quality in early childhood services.* London: Paul   Chapman Publishing.

- Pianta, R., La Paro, K. and Hamre, B. (2008) *Classroom assessment scoring system (CLASS).* Baltimore: Paul H. Brookes.

- Reed, M. (2012) What do we mean by quality and quality improvement? In: Reed, M. and Canning, N. (eds.) *Implementing quality improvement and change in the early years.* London: Sage Publications.

- Richardson, T. (2014) *Speech and language development in a forest school environment: an action research project*. London: SAGE Research Methods Cases. [online] Available from: http://srmo.sagepub.com/view/methods-case-studies-2013/n342.xml [Accessed 2nd April 2016]

- Richardson, T. and Murray, J. (2016) Are young children's utterances affected by characteristics of their learning environments? A multiple case study. *Early child development and care.* **187**(3-4), pp.457-468.

- UNESCO (2015) *Education for all 2000-2015: achievements and challenges*. Paris: UNESCO.

- Williams, P. (1995) *Making sense of quality: a review of approaches to quality in early childhood services.* London: National Children's Bureau.