Aistear: The Social Context of Play and Language Development

The social context of *Aistear* (NCCA, 2009) creates an inclusive learning environment in which pupils are free to communicate with each other in a natural setting. This article reports findings from a small scale study in a multigrade Junior and Senior Infant class in a rural school. The language development opportunities presented by the social context of *Aistear* were explored using a mixed methods action research approach, with data collected by recording observations of play, researcher's reflections and quantitative measures including topic specific vocabulary checklists. Findings from the study included identification of the benefits of the social context of *Aistear* for target pupils experiencing language difficulties. The language development opportunities created by social interaction with both peers and adults were noted in the findings.

Keywords: Play, Aistear, language, DLD, communication

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INTRODUCTION

The ability to communicate with one another is the foundation of all relationships we make. Educators face the challenge of supporting the language development of all pupils in their classrooms. Some pupils start school having been exposed to rich, varied language at home, while others have not. Play is one way pupils of varying language abilities are enabled to learn from each other, trying out language in a naturalistic environment as modelled by peers and scaffolded by practitioners. Pupils' receptive and expressive vocabulary also has a significant impact on other areas of their development, notably their future literacy and intellectual functioning (MacWhinney & Bornstein, 2003). This development of language learning can be scaffolded in the first formal years of education through the creation of a shared context of meaning and experience (French, 2007).

RATIONALE

Communication and language difficulties are one of the most common early developmental problems (Määttä, Laakso, Tolvanen, Ahonen, & Aro, 2014). As an increasing number of children with special educational needs (SEN) are being educated in mainstream schools (Marshall, Ralph & Palmer, 2002) the size of the population of children entering mainstream education with Development Language Disorder (DLD) is also increasing. A review of international studies indicates a reasonable estimate of children, up to the age of 18, with DLD in Ireland is approximately 70,000 (IASLT, 2017). Contributing to this figure are those children identified with DLD in isolation, and the 36,742 children identified with complex needs, including Downs Syndrome and ASD (Conroy & Noone, 2014). Considering the significant impact communication and language skills have on all other areas of learning it is imperative that priority is given to effective development of these skills for all children.

As a Junior and Senior Infant teacher in a multigrade setting in a rural school in the west of Ireland, I have aimed to create the best possible learning opportunities for the pupils in my care by providing a combination of play-based and didactic teaching methods. Play has always been an important classroom feature and I first implemented the *Aistear* curriculum framework (NCCA, 2009) five years ago. A significant amount of recent literature suggests that play-based instruction is particularly effective in the development of pupil's language skills (Conner, Kelly-Vance, Ryalls & Friehe, 2014; Stagnitti, Bailey, Hudspeth-Stevenson, Reynolds & Kidd, 2016; McLeod, Hardy & Kaisar, 2017). Since implementing *Aistear* I could see that pupils enjoyed engaging in play. However, I was unsure of whether all pupils in my class, particularly those with language difficulties, were benefitting educationally from play. A major factor which prompted my investigation into this topic was the recent emphasis on language teaching, and the significant reform it has undergone, in the Irish education system in the form of the new Primary Language Curriculum (PLC) (NCCA, 2015). This heightened awareness combined with my aim to effectively implement the new PLC, motivated me to undertake this research. This article aims to examine the following research question: Does the social context of play areas during *Aistear* impact language development?

LITERATURE REVIEW

Play and Communication and Language for Learning
Communication is a central development task of early childhood (Määttä et al., 2014) with development varying significantly among individuals. From birth

onwards children begin to develop communication skills, with prelinguistic communication skills developing far in advance of spoken language skills. The idea that pupils' language ability should not be categorised as simply average or impaired is highlighted by Rescorla (2009), who describes language abilities as a spectrum. Bates (2004) also promotes this dimensional view of language, suggesting that socio-cognitive skills such as auditory processing, joint reference skills and verbal working memory form the base from which prelinguistic and later language skills progress. Recent curriculum developments, including the new PLC (NCCA, 2015), which is aligned with the principles and methodologies of the *Aistear* curriculum framework, identify the importance of language in the learning process.

Inclusion of Pupils with Language Difficulties

Many factors have been argued to influence the inclusion of pupils with SEN, with teacher's feelings towards inclusive education playing a considerable role in successfully implementing inclusive educational practice (Meijer, 2003). In relation to teaching pupils with speech and language difficulties (SLD), Sadler (2005) reports that while teachers held positive views regarding inclusion, their lack of experience with and limited knowledge of these difficulties meant including these pupils was a challenge. Marshall et al. (2002) argue that in order to overcome these challenges the system needs to be changed. They specify the importance of a change in teacher attitudes, followed by training and the prioritising of resources. Marshall et al. (2002) emphasise that teachers who are not confident in educating pupils with speech and language impairments are unable to meet their educational needs. The new model of inclusion in schools (DES, 2017) and the new PLC (NCCA, 2015) indicate that this change has begun, as they both emphasise the importance of inclusion and early intervention for pupils with language difficulties.

Play

Play is fundamental in the development of every child's intellectual, social, emotional and physical skills (Gray, 2015) and is the main context in which preschool pupils' develop their social and communication skills (Stanton-Chapman & Brown, 2015). Young pupils spend between 3% and 20% of their time playing (Pellegrini & Smith, 1998). However, no consensus currently exists among researchers on best practice in relation to which instructional methods are most effective when teaching young pupils.

Play-based learning experiences are advocated by some (Smith, 2009), while others favour the direct, didactic instruction method (Hall, 2005) found to be implemented in Irish infant classes by the OECD (2004) and Gray and Ryan (2016). While numerous studies indicate positive associations between play-based teaching approaches and academic, social and language development skills

(Conner, Kelly-Vance, Ryalls & Friehe, 2014; Stagnitti et al, 2016; McLeod, Hardy & Kaiser, 2017; Dervan & Egan, 2018), researchers argue and the new PLC highlights that these two opposing approaches need to be blended in order to ensure a balanced experience (NCCA, 2015).

Social context of *Aistear* supporting language development
As highlighted by Stanton-Chapman and Brown (2015) the social context of play is central to the development of young children's communication skills. In contrast to the traditional classroom environment, play offers a wider range of opportunities for pupils to practice and develop their social skills. During play, pupils have the opportunity to play with words and to listen to and learn from each other. Dervan and Egan's (2018) recent study identifies the significant impact the social context of *Aistear* has on the language development of pupils with SLD, suggesting that the social context of *Aistear* provides pupils with the opportunity to play with language, to learn from each other and use new vocabulary in appropriate ways, while direct teaching also proved beneficial in teaching new skills.

Both Dervan and Egan's (2018) study and the *Aistear* curriculum framework (NCCA, 2009) suggest that *Aistear* can play a role in establishing an inclusive social context for all learners. Weisburg, Zosh, Hirsh-Pasek and Golinkoff (2013) also propose that the social context of play constitutes a crucial component in the development of pupils' social skills, while Hurtado, Marchman and Fernald (2008) recognise that the amount of language children hear has a significant impact on their overall linguistic skills.

Conclusion
The review of the literature identifies the critical importance language plays in a child's learning and development and provides the context for this research study which aims to address the question: Does the social context of play areas during *Aistear* impact language development? The study was conducted as part of a Masters in Special Educational Needs and the study was approved by the Faculty Ethics Review Panel at the Dublin City University Institute of Education.

METHODOLOGY

Viewed as a valuable approach to social enquiry (McTaggart, 2006), which bridges a gap between research and practice (Somekh,1995), an action research approach was chosen for this study. The flexibility provided by adopting this approach allowed for mixed methodologies to be employed, ensuring that a comprehensive

analysis of the situation was obtained by the researcher who remained at the centre of the research throughout the study. Table 1 introduces the two pupils, given pseudonyms to safeguard their anonymity, who were recruited for this study. A pilot pupil, from Senior Infants, was also recruited, and all data collection instruments were piloted before the study began. The pilot pupil and both target pupils entered the study when parental consent and pupil assent were obtained.

Table 1: Target Pupil Profiles

Oliver	Lisa
• Attending SLT for the past year. • Has attended 20 sessions. • Identified as having "disordered language". • Receives daily support from the SET in one to one sessions. • Displaying significant sound articulation difficulties which are affecting his ability to be understood by others. • Struggles to pronounce "s", "sh", "c", "g", "r" and initial consonant blends. • Eager to contribute verbally and interact with peers.	• Awaiting SLT assessment at beginning of study. • Not receiving individual SET support. • Extremely reluctant to engage in verbal interaction with adults and peers. • Exhibiting difficulties articulating some sounds, constructing sentences and using pronouns. • Rarely responds to questions verbally. • Sometimes responds to questions non-verbally (shrugs shoulders, nods, shakes head) • Sentence structure is poor as is her use of pronouns and tenses.

Pre-intervention, an oral language profile of each target pupil was constructed using the following data collection methods:

- Bracken Basic Concept Scale-Third Edition: Receptive
- Bracken Basic Concept Scale: Expressive
- Mean Length of Utterance in morphemes (MLU-m)
- Topic Specific Expressive Vocabulary Testing
- Phonic checklists
- Individual pupil interviews

Field work for this action research began by establishing a baseline of oral language skills for both pupils and evaluating children's basic concept development using the Bracken Basic Concept Scale-Third Edition: Receptive (BBCS-3:R) (Bracken, 2006a) and the Bracken Basic Concept Scale: Expressive (BBCS:E) (Bracken, 2006b). The BBCS-3:R measures children's comprehension of the basic educational concepts in ten categories. It is a curriculum-based assessment of school-related concepts such as colour, size, letters, numbers and shape and is used to assess children's understanding of key concepts relating to the infant curriculum. The 3rd edition of this concept scale suggests its value as a measure of school readiness skills and to identify pupils with language impairments (Bracken, 2006a).

The BBCS-3:R was completed individually with each pupil by the researcher at the beginning of the study to assess their comprehension of educationally relevant topics, while the BBCS:E was used to evaluate the children's acquisition of these basic concepts expressively. As the suggested age range for administering this test is 3 years to 6 years 11 months, it was an appropriate measure to utilise in order to develop a comprehensive profile of the children's receptive and expressive language abilities. These pre-study results highlighted areas of strength and areas for development for each pupil. For example, Lisa's receptive language was "delayed" in the area of "Time/Sequence, while Oliver's expressive language was "very delayed" in the area of "Quantity".

The MLU-m was utilised to measure target pupils' language complexity skills. It has been identified as a useful benchmark in studies of children with speech and language difficulties (Rice, Redmond & Hoffman, 2006). Topic specific expressive vocabulary testing was used pre- and post-study to compare vocabulary acquisition relating to the two *Aistear* topics, "Topic 1: The Home" and "Topic 2: The Dentist". Pre-study vocabulary testing also informed the design of the action research in terms of vocabulary focus. The cyclical action research approach of planning, acting, observing and reflecting was adapted for this study as it was appropriate to the cycles taking place during the research (Sullivan, Glenn, Roche & McDonagh, 2016). Ghaye's (2010) model of reflective practice, outlining reflection as a process of *review*, *projection* and *improvising* was adapted. The following data collection methods were also utilised to monitor target pupils' behaviour in the social situations which *Aistear* presented:

- Observation Schedule
  An observation schedule was formulated to structure the observation and to add to the trustworthiness and credibility of the study. Pupils' language was observed in different contexts, at various play areas and also throughout

the school day to allow for a more holistic picture of their language needs (Owens, Metz and Haas, 2014). The observation schedule was segregated into the following sections: *description, this experience shows, what can be done to support/extend learning?*

- Reflective Journal
  Ghaye's (2010) model of reflective practice was adapted throughout this study. This included reviewing- looking back to see what has already been achieved, projection - looking forward towards future goals and improvising and responding creatively in the moment. Considering this, the reflective journal was central to informing this action research and involved my interpretation and explanation of events described

According to Saunders, Lewis & Thornwill (2012) combining qualitative and quantitative measures of data collection and analysis allow the researcher to reflect on different perspectives of the subject, therefore creating a comprehensive insight into the effectiveness of the social context of *Aistear* in developing the language skills of pupils with language difficulties.

Procedure for Intervention

Aistear is a framework which encompasses the *"play, plan, review"* method - an approach used in similar research by Craig-Unkefer and Kaiser (2002). I facilitated *Aistear* in the mainstream classroom daily with a multigrade Junior and Senior Infant class of 28 pupils. I was the only adult present in the classroom throughout the *Aistear* sessions. Target pupils were observed daily during *Aistear* over a six week period. *Aistear* was implemented for approximately one hour each day. Table 2 outlines the daily structure of *Aistear* in the classroom.

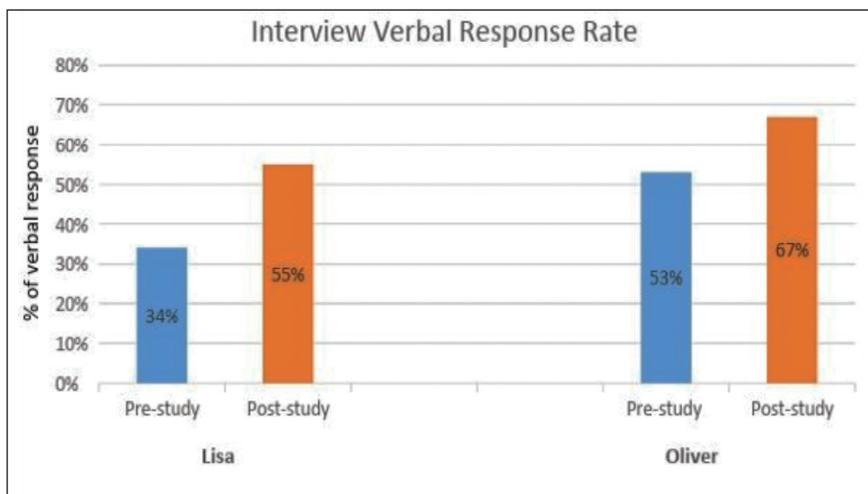**Table 2: Daily Structure of *Aistear***

Planning (5 minutes)	• Each group made a "huddle" in which they planned for the play activity under the theme being explored. • Researcher circulated and scaffolded/assisted when necessary. • Planning recorded every second week.
Play (30-35 minutes)	• Pupils engaged in activities with their peers. • Researcher monitored, contributing direct and indirect instructions to groups to focus play on topic.
Tidy-up (5 minutes) Review of play (5 minutes)	• Pupils tidied up and returned to their seats. A representative from each group, chosen by the researcher, reported back on the area of play and the activity they engaged in with their group. • Review recorded every second week.

As suggested by the new PLC (NCCA, 2015) play was combined with direct instruction. The *Aistear* theme was carried into other curricular areas throughout the school day. Reading lessons and explicit language teaching sessions were focused on the themes of "The Home", the focus of *Aistear* in Weeks 1-3, and "The Dentist", the focus of *Aistear* in Weeks 4-6. The process of evaluating observations and reflections continued daily throughout the research study. In the final week of the study semi-structured interviews were repeated, as were the topic-specific vocabulary checklists ("The Home" checklist was repeated in week four) and the phonic checklist. MLU-m was calculated again in week six using a combination of 50 utterances from interview and planning/reflection audio recordings.

FINDINGS AND DISCUSSION

Analysis of the data collected conveyed that the social context of *Aistear* had a positive impact on supporting the language development of the participants involved. This intervention was assessed using a combination of semi-structured interviews, topic specific vocabulary checklists and calculation of MLU-m in the final week of the study. Observations and reflections were also examined and contributed to the findings. In Figure 1 the measured improvement in both Oliver and Lisa's verbal response rate as observed during post study interviews is outlined.

Figure 1: Target Pupils' Verbal Response Rate in Pre Study and Post Study Interviews

In Figure 1 an improvement in both Lisa's and Oliver's verbal response rate is evident. Out of a total of 145 utterances in her pre-study interview Lisa only responded verbally to 49, equating to 34% of utterances. In the post-study interview, Lisa's verbal responses had risen to 61 out of 112 utterances, 55%, an improvement of 21%. In his pre-study interview Oliver responded verbally to 56 out of 106, or 53% of his utterances. In his post-study interview Oliver made verbal contributions to 84 out of 126, or 67% of utterances. With an increase in his verbal response rate of 14%, this finding indicates Oliver's improved willingness to engage verbally in conversation in a one-to-one setting.

Social Context of *Aistear*

Play is the main context in which preschool children develop their social and communication skills (Stanton-Chapman & Brown, 2015), and the impact of the social context of *Aistear* on language skills was very evident throughout this study. Notes from the reflective journal and observations indicated that the social context of *Aistear* played a significant role in creating language development opportunities. The following extract from observations of Olivier at the Junk Art area illustrates this clearly:

> *Creating a house at junk art, he chatted to N. about pets and asked how her fish died. He initiated conversation with her. Drew windows, doors and a stairs on the box he was using. Expressed himself verbally willingly. He is interested and willing to converse with others in his group. He shared his ideas and asked questions. Pronunciation difficulty made conversing with peers a challenge, stairs= dairs and N. could not understand him at times.* (Observation 2, 09.01.18)

The opportunity provided to build social relationships was one of the study's key findings. Lisa's increased motivation to use language in the social context of *Aistear* was noted in observations:

> *(Lisa was) very eager to engage and be part of group action. Laughing and interaction was more frequent than usual. She was more interested in the topic and excited to engage. The excitement of a new topic could have been the reason for more eager engagement.* (Observation 15, 31.01.18)

Role of Peer Interaction

Peer interaction played a significant role in promoting language development of target pupils at various *Aistear* areas. This was consistently noted in observations. Similar to Dervan and Egan's (2018) study, the social context of *Aistear* was observed to have a positive impact on pupils' confidence engaging with each other. While Oliver's articulation difficulties posed some challenges for him when

communicating with his peers, all observed peer interaction was of a positive nature, with peers showing patience and understanding when they were unable to understand Oliver's verbal contributions. In observations recorded at the *construction* area it was noted that Oliver initiated conversation and spoke freely to others in his group.

CONCLUSION

While recognising the limitations of this small-scale study, focusing on two participants, its findings support previous research. It presents encouraging evidence to support the implementation of *Aistear,* identifying it as an inclusive framework, with the social context of play providing a supportive context for language learning (Weisburg et al., 2013). Increased interaction between pupils during *Aistear* meant increased language use opportunities supporting Hurtado et al.'s (2008) claim that pupils' overall linguistic skills are significantly impacted by the amount of language they hear. The social context of *Aistear* promoted complex language interactions such as negotiation of roles at the *role play* area, co-operation and turn taking skills during paired and group tasks and in turn, the opportunity to develop and practice the skill of self-control (Weisburg et al., 2013).

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