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ABSTRACT

This paper outlines the underlying principles that have guided the development of an observational orientation to assessing children's learning. The development of an observation orientation was achieved through a process of a number of action-type research projects within a range of early years settings in the United Kingdom. The paper outlines a personal story of discovery in developing an observational and reflective stance that draws upon a range of perspectives within the learning context to understand how children learn. It is argued that this strategy is a key to increasing the effectiveness of interventions to support, enhance, and provoke learning. The paper describes the current United Kingdom context surrounding the development of a new Foundation Stage Profiling in the early years to replace the current Baseline Assessment. The paper further asserts that the observational assessment orientation is a powerful tool for United Kingdom practitioners to respond to the new Foundation Stage Profiling requirements. (Contains 16 references and suggested readings.) (Author/KB)

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**Observing Children's Learning: Informing Effective Intervention**  
*(A personal story of investigative research in action)*

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**SUMMARY**

I have spent many years working with children under five, and have learnt a great deal through watching and listening to them at play. This paper outlines the underlying principles, drawn from interpretative research paradigm, that has guided the development of an observational orientation to assessing children's learning. This has been achieved through a process of a number of mini-investigative action type research projects, within a range of Early Years settings in the UK. I outline a personal story of discovery as I have developed an observational and reflective stance that draws upon a range of perspectives within the learning context, to understanding how children learn. I argue that this is a key strategy in our drive to increase the effectiveness of our interventions to support, enhance and provoke learning. The current UK context surrounding the development of a new Foundation Stage Profiling in the Early Years, to replace Baseline Assessment, is briefly outlined. I see the observational assessment orientation as a powerful way forward for practitioners in the UK as they develop their observational assessment practices, in response to the new Foundation Stage Profiling requirements.

**KEYWORDS**

Profiling: Assessment: Observation: Learning Stories:

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## INTRODUCTION

I have spent many years working with children under five, both in the mainstream and special needs sphere of education. When I was a teacher within a mainstream nursery context, I observed children learning through play, and gathered information from all sources, including the parents, in order to try and understand, and therefore meet, their individual needs. I used that information to both review my own practice, to formulate curriculum plans, and inform my interventions in their play. Throughout my career to date, I have continued this practice of observing children's learning, as I have reflected upon and sought to understand how they learn, and how this information can inform our interventions to enhance and further provoke learning.

When I undertook a research degree, I investigated the underlying principles that guided my observational assessment practices. Interpretative paradigm principles (the concepts of Multiple Realities, Holistic data gathering techniques, Knowledge Formation based upon reflective practices, and Value Laden Subjectivity involving confirmed personal judgements) not only informed my thinking, but provided a language to articulate the underlying principles of my developing practice.

### 1: Context Dependent - Holistic data gathering:

The importance of observing children within their familiar teaching and learning contexts is important for the practitioner to understand the needs of individual children. From experience, I have seen children under-perform in contexts or with adults who were unfamiliar to them. The work of Heshusius (1991) and Bronfenbrenner (1979) influenced my thinking in regard to developing the importance of the context or ecology of assessment. By adopting more holistic approaches to gathering data from the child's teaching and learning context, the child and teaching pedagogy become balanced in considering how to promote learning more effectively.

### 2: Reflective Thinking - Knowledge formation based on reflective practices:

Schon (1987) argues the importance of knowledge being established through the act of teaching, knowledge that has true relevance to the practitioner. The importance of developing practices that encourage a process of gathering data, reflecting on its implications for learning, experimenting within the teaching and learning context in order to promote learning, gathering further data, leading to further action, establishes a powerful cycle of continuous theory development.

### 3: Subjective Judgements - Value laden involving confirmed personal judgements:

Inevitably, knowledge that emerges from the interactive web of the teaching and learning context, will depend upon the judgements made by the observer. His / her values and beliefs will influence the interpretations and judgements made upon the gathered data. Iano (1986) makes powerful arguments for not separating fact and technical means from human values and interests, as this will lead to assessors not connecting with the central concerns of teaching and learning. The important issue here would not seem to be whether the interpretations are value free and objective or value laden and subjective, but whether the views are confirmed in some way, which leads me to the fourth principle.

### 4: Collective Perspectives - Multiple Realities:

Being holistic in gathering data inevitably involves the need to gather the views of the various participants in the teaching and learning context of a child-in-focus. In order to provide a balance to personal subjective judgements, there is a need to confirm such interpretations by drawing upon a multiplicity of views and perspectives. The possibility of participants holding aspects of the truth, and being in possession of pieces of knowledge is a crucial concept underpinning the need for collaborative working (ref. Bridges 1986).

#### 5: Process Orientation:

Through experience, I would wish to add a fifth principle to the list. I have been privileged to work with many practitioners, in a diverse range of Early Years settings. I have not found any one set of observational assessment procedures or model that answers all situations, contexts and questions. What has emerged from my practice is the importance of the above underlying principles that inform and guide the process of observing children's learning, a process that builds upon the strengths and current practices of practitioners.

The process of observing in context, seeking the views from all those involved, reflecting on and attempting to make sense of the information gained in order to inform our practice, is a very powerful orientation to develop in our work with young children. This observational orientation to assessment is a key strategy in our drive to increase the effectiveness of our interventions to support, enhance and provoke learning. These underlying principles have guided my on-going mini-research work with practitioners from a range of Early Years settings.

### METHODOLOGY

As part of my professional development activities, I work with practitioners in their own contexts, as they seek to reflect upon their own practice in order to improve their effectiveness. We follow up questions that emerge from our professional dialogues, and these questions change and new ones emerge over time, in a continual process of on-going reflection. These mini-research activities are influenced by interpretative research paradigm methodology, and are very much action research in action.

I support my colleagues (co-researchers) in gathering data about children's learning from a range of play contexts within their settings, using a range of techniques. We carry out observations, both anecdotal observations as well as longer more descriptive or narrative type observations. We gather samples of children's work and photographic evidence, which is duly annotated. They are encouraged to record parental observations and discussions and add them to the evidence base.

Together we record our thoughts and questions as they emerge over time; they record outcomes of the practices or interventions with children that they have tried as a result of our deliberations; and they action plan the next steps in their developing observational assessment practices in an on-going diary.

Colleagues are encouraged to record their thoughts as they observe, to interpret what they see, and highlight at the end of their observations what they have noted about children's learning. They are encouraged to articulate their thoughts as we review children's pictures, photographs, models, paintings, etc. and record our deliberations and emerging theories about how particular children are learning, in order to inform our next steps with children.

Dialogues, discussion, sharing of ideas and thoughts, with all those involved is crucial in the refining of theory development. Discussions with parents and other colleagues are minuted in on-going research diaries, along with my regular conferencing with the practitioners (co-researchers).

At the end of the day, we are seeking to enrich our understanding of how individual children learn, and how best we can intervene to provoke further learning, and increase our own effectiveness as practitioners.

## UK CONTEXT:

It would seem important at this point to alert the reader to the UK context regarding developing assessment practices in the Early Years. Since September 1998, children entering the Reception year in schools (the year in which the children become five years of age), teachers have been required to assess the children within the first seven weeks of the children's first term, referred to as Baseline Assessment. This assessment has been focused on children's personal and social, language and literacy, and mathematical development. The assessment was supposed to be based on teachers observing children in play contexts over the seven-week period. In reality the assessment has become a summative judgement against a set of criteria. Many activities have been set-up to enable a quick judgement to be made against the criteria. These scores have then formed the baseline from which all future learning can be measured. The notions of assessment to inform practice to meet the individual needs of children, has proved not to be on the agenda of the UK Government, who are more concerned about league tables and value-added scores, despite the Baseline Assessment being condemned as highly unreliable data for such purposes. Concerns have been raised nationally regarding this unreliable Baseline Assessment set of procedures.

Since September 2000, a national Early Years Curriculum Guidance document has been produced, leading up to a set of Early Learning Goals, or outcomes expected of children by the time they have completed their Reception year in school. The Foundation Stage has been established, encompassing children aged 3 to 5 years of age, and very firmly established is the importance of play within this Stage of development. This new approach to Early Years Education (some would argue just a returning to common sense, and what we already know about how young children learn) has been universally acclaimed as very good and a returning to meeting the learning needs of young children.

Inevitably questions have been raised regarding how we assess children's learning within this new Foundation Stage context. A national debate is currently underway, and a new Foundation Stage (Baseline) Profiling is due to be implemented from September 2002. A summative assessment against a set of performance criteria will shift from the beginning of the reception year to the end of the reception year (June 2003), which will form a baseline for Statutory Schooling, against which future performance will be measured.

What will this new Foundation Stage (Baseline) Profiling look like? It could take the form of some test-like activities, for example, paper and pencil or computer multi-choice type tasks. It could be fairly narrowly focused on reading, writing and number, with some form of personal and social development scores to keep Early Years practitioners happy! Alternatively, it could be based on all areas of learning, thus being broad and not valuing one area of development over another. It could be based on observing children's learning in their normal play contexts. It could involve contributions from practitioners, parents, and children. It could be useful in informing intervention strategies, and the development of next steps to enhance learning. It could form part of a Foundation Stage Profile, built up over the six terms of the Foundation Stage, providing a clear picture of how young children are developing and learning overall.

Whatever form the assessment takes will eventually dictate how the new Early Years Curriculum, based on the Government's Curriculum Guidance, will be implemented and developed. If the former procedural approach is adopted then clearly reading, writing and number will dominate the development of the Foundation Stage curriculum. If the latter, then a more holistic approach will emerge. The mini-research work I have been involved in over the past number of years, has revolved around the important questions of how we assess young children's learning, and increase our understanding, and thus effectiveness, in promoting

learning. It is about getting that balance between teaching pedagogy and the child's learning more in tune.

#### REFLECTIVE QUESTIONS:

As I have sought to support and encourage practitioners in my work as an Education Adviser, the dialogues generated have often centred around the key questions – how are children playing and what are they learning through their play? Are there patterns in their play behaviours that we could capitalise upon in our interactions with young children?

In the nineties, the work of theorists like Chris Athey (1990) were very influential, and the subsequent Froebel Blockplay Research (Gura 1992). Chris Athey proposed that children did exhibit patterns of play behaviour (schematic behaviours) that reflected the development of young children's thinking. The questions that emerged for me were – What are these patterns of play behaviour? Do all children have to experience all schematic play behaviours? Do children follow a developmental pattern? If so can we predict how children will develop or do children actually follow their own developmental pathways? Alternatively, am I trying to read too much into children's play behaviours, and thus pushing patterns of play into notions of schematic behaviour?

A period of time followed when I was developing my skills of observing children's learning, seeking to understand schematic play behaviours, and identify them in practice. A teacher from a village school expressed her desire to carry out a mini-research project in her class and invited me to support her in this venture of exploration. We began to set up an action research project and develop the methodology along the lines of interpretative / investigative research practices, which has formed a blue-print for the way I have worked with practitioners over the intervening years. Through this project, we began to address some of the questions posed above, and to see definite schemas emerging in the children's play. Further questions emerged -Would a knowledge of schematic behaviours help in planning for individuals, or support intervention and thereby increase the effectiveness of learning? At about this time I was influenced by the work of Chris Pascal and Tony Bertram (1997), through involvement in the Effective Early Learning Programme. In the programme, through the use of the Leuven Involvement Scales (based on Laever's work), the 'effective learning' of children can be measured. Through the encouragement and support of schematic behaviours, I found that children's levels of involvement increased, signalling an increase in effective learning.

Indeed, we found that a knowledge of children's preferred schema did inform intervention work with children, and increase their concentration and involvement in activities. This then had implications for developing practice, as we found we were becoming more responsive to children's learning needs, and therefore were unable to plan too far ahead. We also found that there were implications for not introducing formal learning too soon, as this cut across their schematic play and the effective learning they were engaged in.

If learning can be increased by fostering schematic play behaviours, then I wanted to explore more fully the concepts underpinning the schematic play behaviours. I found a good practitioner who was also interested in exploring schemas further and we began another mini-research venture to explore the following action research question - What are the underlying concepts in schematic play, and why are they so important to future learning? We selected a number of children to observe in the teacher's Early Years Unit, whom we thought would best help us in our developing understanding of schemas. We duly got the permission of the parents to allow their children to be involved in the project, and were anxious to share our thoughts with them. As we observed and deliberated over the evidence, a range of concepts emerged which

underlined the importance of play for children's mathematical development in particular. Concepts, such as shape, area, number, space, difference, measurement, pattern, size, balance, forces, speed and structure, are very much featured in their schematic play. This made us re-think about how we planned the activity areas within the learning environment. If certain activity areas did not provide for particular schematic play, then would such children with those preferred schemas not venture into those areas, and thus not experience that area? This had a profound effect upon the planning of the environment, a re-organisation of resources and the acquisition of additional resources to support a wide range of schematic play.

## A GROWING UNDERSTANDING OF HOW WE DOCUMENT CHILDREN'S PLAY

With reference to the national debate on profiling children's learning, two strands emerged in my observational practices. How do we chart the process of children's learning over time, and how do we record the progress children are making in their learning. These two threads became the focus of my continuing investigative research. Alongside this interest in understanding children's learning, I was concerned with the manageability of the documentation of their learning. I had visited on a number of occasions the Pre-schools of Reggio Emilia (Northern Italy), and was influenced by the quality of their documentation. I wanted to explore ideas from Reggio in practice.

I found a practitioner who was very interested in developing her observational skills and documentary evidence, but would not undertake anything that did not inform her intervention with children or planning of the Early Years environment. The emphasis within the teacher's practice was upon child-initiated learning. This provided an opportunity to refine observational assessment practices into a manageable format. I began to develop sequences of observations over a session in an attempt to explore the process of learning, as I had witnessed in the Reggio Emilia Pre-schools, and whether any threads of thinking emerged in the range of self-initiated play activities. In this way, I was in fact following the interests of the child, and began to intervene to re-enforce, extend and reflect with children on their learning based upon the observations carried out. Once again we found that children's involvement levels increased, and their play became more complex and creative. The teacher developed some of the ways of documenting children's learning and adopted them into her practice. One of the interesting things to emerge was the interest of parents in the documents we were producing.

The investigative work was continued with a second teacher who was interested in ICT. We began to develop the observations and incorporate photographic evidence using our ICT skills to illustrate the process of learning. Once again we found that parents were very keen to hear about their children's learning stories (observed sequences of learning) and wanted to have the documentary evidence we were developing. It appeared that they began to develop an interest and understanding of their child's learning and wanted to contribute to the process.

Through professional dialogue and discussion, the essence of documenting learning or profiling began to emerge. Sequences of learning or 'children's learning stories', as we began to call them, became the main form of documentary evidence. However, as the profiles expanded over the course of a year, it became obvious that children's learning was progressing and we had clear evidence to demonstrate this. It then became easy to complete a summary of the children's learning at the end of the year, based clearly upon observational evidence gathered across the year.

PROFILING:

Through the process of on-going mini-research projects with a range of experienced reflective Early Years practitioners, a number of practices have developed to form the backbone of a profiling process, which is orientated towards understanding children's learning. Here we have also been influenced by the work of Margaret Carr (2001) and her work on 'Learning Stories', and her references to a range of 'voices' within the assessment frame.

#### Practitioner's Voice

- Narrative or descriptive observations which are a rich source of data – covering many aspects of learning. These can take two forms: – a range of short observations over the period of a session or more in-depth focused observation
- Anecdotal observations which are short observations of significant play or language

#### Child's Voice

- Work sampling – carefully annotated to identify the learning

#### Parental Voice

- Parental contributions – via conferencing or regular sharing of learning stories

#### Final Summary

- Perhaps against the Early Learning Goals, evidenced by the learning stories, which then becomes the final 'baseline' scores.

### WHAT HAVE I LEARNT?

Many Reception teachers in my Local Education Authority may be more formal in their approach, and thus more didactic in their teaching, hence completion of a check-list approach to assessment may prove easier to manage, providing it is skills based and easily measured. Such tasks would appear to be easier to carry out in set-up situations rather than spontaneous play contexts. To adopt an observational orientation to assessment in such contexts would prove unmanageable, with ratios of 1:30, for how could a teacher ever manage to observe children's learning across all areas of learning?

However, in Reception Classes, Early Years Units and Nurseries where the continuous curriculum is part of the practice and also staffing ratios better (1:13/15), where learning is more child-initiated, staff are able to carry out observations of normal play situations, covering all areas of learning. This leads to a credit model of learning, where planning ensues to build upon children's strengths. Observational assessment in such contexts is seen as part and parcel of teaching, is on-going, and helps staff to know their children. Also, observational data tends to be multi-purpose, as one piece of evidence can meet a range of learning outcomes.

Teachers who wish to move towards an observational orientation to assessment find it hard to leave behind the tick sheets, which they may be more familiar with, as they provide security. It seems that they have to retain their tick sheets as they develop their observational skills. As they acquire observational skills, and find that they really begin to know their children and understand their individual learning pathways, they find the observational approach so valuable, that they begin to jettison their tick lists. Also, in the early days of acquiring observational skills, I have found teachers uncertain as to how to focus on learning, and not get carried away with reams of descriptive notes. Once they have developed their observational skills and a way of presenting the learning stories, they seem to find that parents suddenly become interested in their children's learning stories, and want to contribute and share.

I have alluded to the need for Reception teachers to plan the continuous curriculum. When I visited Reggio Emilia Pre-schools, I could see that the on-going provision was well established, which then freed up the practitioners to observe, intervene and provoke learning with individual



or small groups of children, even within contexts with higher adult-child ratios. With the introduction in the UK of the Foundation Stage curriculum guidance, the need to develop the wide range of activity areas that constitutes the continuous curriculum, has had to be revisited and reviewed. In the contexts where this has been well established, developments in profiling has proved a much easier task.

Reception teachers need to plan for the continuous curriculum covering all the activity areas. These areas need to be planned purposefully, with the teacher well aware of the learning potential. They need to be adjusted, changed, enriched, extended over the term / year as children develop. Such planning has implications for resourcing and how materials are made accessible and available for children. The second form of planning that needs to be in place is focused planning. The most obvious need is to plan story time; circle or music time; and focused times to work with individuals and small groups on key skills.

If these two strands of planning are in place, then the issue of observing children's learning related to lack of time, or guilt complexes about not actually teaching seem to fade. In fact the act of observing becomes seen as part and parcel of teaching, and an essential teaching skill to develop. Planning for intervention and assessment become inseparable, and the cycle of planning, assessment, intervening to meet children's needs becomes evident. This may mean a 'culture shift' or a different way of working for some practitioners.

#### CONCLUSION:

These underlying principles of the interpretative research paradigm (the concepts of Multiple Realities, Holistic data gathering techniques, Knowledge Formation based upon reflective practices, and Value Laden Subjectivity involving confirmed personal judgements) have guided my on-going mini-research work with practitioners from a range of Early Years settings. The process of observing in context, seeking the views from all those involved, reflecting on and seeking to make sense of the information gained in order to inform our practice, is a very powerful orientation to develop in our work with young children. This observational orientation to assessment is a key strategy in our drive to increase the effectiveness of our interventions to support, enhance and provoke learning. I see this orientation as a powerful way forward for practitioners in the UK as they develop their observational assessment practices, in response to the new Foundation Stage Profiling requirements.

With the national debate upon developing profiling, one concern is the voice of the parents / carers in the process. We have found that parents are very interested in their children's learning, when presented in the form of learning stories. They seem to see their children in the stories, and the episodes have resonance and meaning for them. One of my underpinning principles is the importance of multiple viewpoints, and so to develop the concept of parental voice in the profiling development, and indeed the child's voice, would seem crucial. Perhaps we hold the key via the children's learning stories? This is an area of further investigation that I plan to undertake in this forth coming year.

#### REFERENCES:

- Athey C** (1990)  
Extending Thought in Young Children  
Paul Chapman - London
- Bridges D et al** (1986)

Performance Appraisal as Naturalistic Inquiry: A Report of the Fourth Cambridge Conference on Educational Evaluation

Cambridge Journal of Education Vol 16 No 3 pp221-233

**Bronfenbrenner U** (1979)

The Ecology of Human Development - Experiments by Nature and Design

Harvard University Press - Cambridge Massachusetts, London England

**Carr M** (2001)

Assessment in Early Childhood Settings – Learning Stories

Paul Chapman - London

**Gura P (Ed)** (1992)

Exploring Learning – Young Children and Blockplay

Paul Chapman - London

**Heshusius L** (1991)

Curriculum-Based Assessment and Direct Instruction: Critical Reflections on Fundamental Assumption

Exceptional Children pp315-328

**Iano R P** (1986)

The Study and Development of Teaching: With Implications for the Advancement of Special Education

RASE Vol 7 pp50-61

**Pascal C and Bertram A (Eds)** (1997)

Effective Early Learning

Hodder and Stoughton – London, Sydney, Auckland

**Schon D A** (1987)

Understanding the Need for Artistry in Professional Education

In Schon D A Educating the Reflective Practitioner

Jossey-Base Publishers - San Francisco, London

#### FURTHER READING:

**Bartholomew L and Bruce T** (1998)

Getting to Know You – A Guide to Record-Keeping in Early Childhood Education and Care

Hodder and Stoughton – London, Sydney, Auckland

**Drummond MJ** (1993)

Assessing Children's Learning

David Fulton - London

**Giudici C, Rinaldi C and Krechevsky M (Eds)** (2001)

Making Learning Visible – Children as Individual and Group Learners

Reggio Children – Reggio Emilia Italy

**Hutchin V** (1999)

Tracking Significant Achievement in the Early Years

Hodder and Stoughton – London, Sydney, Auckland

**Nutbrown C** (1994)

Threads of Thinking – Young Children Learning and the Role of Early Education

Paul Chapman – London

**Paley VG** (2001)

In Mrs Tully's Room – A Childcare Portrait

Harvard University Press – Cambridge, Massachusetts and London England

**Stierer B, Devereux J, Gifford S, Laycock E and Yerbury J** (1993)

Profiling, Recording and Observing

Routledge - London



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