

SOCIAL AND HEALTH CARE OVERVIEW AND SCRUTINY COMMITTEE

Date of Meeting	Thursday, 12 th February 2026
Report Subject	Developing Professional Understanding of the Impact of Early Experiences on Neurodevelopment in the Early Years using the 'Oxford Brain Story' Training Approach
Cabinet Member	Cabinet Member for Social Services and Wellbeing
Report Author	Chief Officer (Social Services)
Type of Report	Operational

EXECUTIVE SUMMARY

This report outlines the purpose, progress, and impact of the Oxford Brain Story (OBS) initiative delivered across North Wales, with emphasis on implementation and outcomes within Flintshire. OBS provides an accessible, evidence-based framework explaining how early experiences, including trauma, shape brain development, and lifelong outcomes.

Building on the foundation of the Oxford Brain Story initiative, the focus within Flintshire has been to bridge the gap between scientific understanding and practical application within frontline services. The OBS training equips practitioners with the tools to recognise how early adversity and nurturing environments directly influence neurological pathways, thereby shaping future wellbeing and resilience. Integrating this evidence-based approach into daily practice encourages reflective conversations among professionals and families, fostering a shared language around brain development and creating opportunities for more effective intervention and support in the crucial early years.

Since the introduction of the Oxford Brain Story initiative in North Wales, considerable progress has been made in embedding its principles within early years practice, particularly in Flintshire. A cross-sector group of practitioners from health, social care, and education have participated in OBS training, strengthening their understanding of how early experiences shape neurodevelopment. Regular workshops and reflective sessions have been held, fostering collaboration and enabling staff to share best practice and challenges. This has led to increased confidence among professionals in recognising signs of adversity and engaging in meaningful dialogue with families. Early evaluation feedback highlights improved multi-agency working and growing adoption of a shared language regarding brain development and resilience. The groundwork laid through these activities has

paved the way for wider dissemination and integration of OBS concepts across frontline services, with further expansion planned for the coming year.

RECOMMENDATIONS

1	Members note the findings of the North Wales OBS evaluation and the positive impact on early years practice.
2	Members support continued development and expansion of the OBS pilot across Flintshire and the wider region.
3	Members support the development of an approach that integrates OBS training into induction processes for new staff in relevant frontline roles.
4	Members note ongoing awareness-raising and dissemination of OBS findings across North Wales services.

REPORT DETAILS

1.00	EXPLAINING DEVELOPING PROFESSIONAL UNDERSTANDING OF THE IMPACT OF EARLY EXPERIENCES ON NEURODEVELOPMENT IN THE EARLY YEARS USING THE 'OXFORD BRAIN STORY' TRAINING APPROACH
1.01	<p>National Background</p> <p>Responsible citizenship, lifelong health, strong communities, educational achievement, economic productivity, and successful parenting of the next generation are all areas that public services are consistently striving to improve. A crucial component in this quest is healthy brain development in the early years. Research has demonstrated that experiences in the early years provide the building blocks for lifelong health- it is the actual experiences early in life and at other sensitive periods of development that can affect our brains in ways that may determine our health and outcomes as we grow older (Reuben <i>et al</i>).</p>
1.02	<p>This knowledge has important implications for both policy and practice, but despite its significance, the science behind early brain development is not widely disseminated, particularly to front line staff working with children and parents in health, education, social services, the criminal justice system and other public services.</p>
1.03	<p>In partnership with the Palix Foundation and the Harvard Centre on the Developing Child, the University of Oxford are working on a project to engage policymakers, practitioners and the public with the Brain Story and want to expand this learning and community. The Brain Story is a narrative framework that shares key scientific knowledge (Danese <i>et al</i>) about early</p>

	brain development through tools, resources and a certification course, with the aim of building healthy brains and resilience in families and communities. The key scientific knowledge is utilised from the same body of research from which the Adverse Childhood Experiences (ACEs) information and the Trauma Informed Approach were devised (Baldwin <i>et al</i>).
1.04	The Brain Story highlights how early experiences shape healthy brain development and provides practical tools to support this. It explains that trauma—whether from single or repeated harmful events—can have long lasting effects on a child’s physical, emotional, social, and cognitive wellbeing. Because trauma can significantly disrupt developmental processes, reducing its impact is essential for children’s long-term outcomes and for society’s wider wellbeing. The Brain Story offers an accessible framework that helps families, practitioners, and policy makers understand and mitigate the effects of adversity, promoting stronger, healthier brain development.
1.05	There is no single dataset quantifying the proportion of Flintshire children who have experienced trauma. However, national ACE studies consistently show that almost half of the population in Wales reports at least one adverse childhood experience, and 14% report four or more. Applying these national patterns locally suggests that a significant number of children in Flintshire are likely to be affected by adversity or trauma.
1.06	<p>Description of the Brain Story</p> <p>The Brain Story provides an accessible framework that illustrates how the experiences we encounter through our relationships and environments shape the architecture of the developing brain. It translates complex scientific concepts into a coherent narrative that is meaningful to nonspecialist audiences. Drawing on decades of robust research, it offers a body of knowledge widely recognised by experts as essential for practitioners, policymakers, and the wider public.</p> <p>The Brain Story includes a suite of tools and resources—most notably its powerful visual metaphors—alongside a certified training programme. These materials are designed to be engaging, accessible and scientifically rigorous. Their core purpose is to enhance understanding of how early experiences become biologically embedded, for better or worse, and how these experiences can influence long-term developmental and life outcomes.</p>
1.07	<p>Flintshire’s Involvement</p> <p>In late 2022, the University of Oxford introduced the Brain Story to the Regional Early Years Integration and Transformation Group, leading to agreement across North Wales local authorities to progress the work. Welsh Government regional funding was used to appoint a Project Co-ordinator, who worked with Oxford to develop a pilot training session using a Core Training Video and the Brain Architecture Game. The training was delivered to six key staff members in each North Wales authority, and an independent evaluation of the pilot was completed.</p>

	<p>The independent evaluation by Dr Ceryl T. Davies identified six key recommendations for developing a plan beyond the initial pilot for Flintshire and North Wales.</p>															
1.08	<p>Recommendation 1: Continue to develop and extend the North Wales OBS pilot across North Wales, through a dedicated development plan.</p> <p>Recommendation 2: Encourage the development of the North Wales OBS pilot as part of the induction pack and training for all new workers starting a role to support families within early years settings.</p> <p>Recommendation 3: Explore the feasibility of ‘rolling out’ the North Wales OBS pilot across local authority departments, beyond early years support.</p> <p>Recommendation 4: Develop guidance and principles around the use of the North Wales OBS tools to support families, with a focus on linking the application of the model to the assessment of needs, learning style, and learning needs of parents/carers.</p> <p>Recommendation 5: Develop a North Wales OBS practitioner forum to share good practice and practice development to promote the skills of practice leads who have completed the OBS training.</p> <p>Recommendation 6: Develop a North Wales OBS Community of Practice to facilitate both the interface and knowledge exchange between research and practice.</p> <p>Recommendation 6: Outline a plan for raising awareness across North Wales of the OBS pilot, including highlighting the key messages around healthy brain development and trauma.</p> <p>Recommendation 7: Formulate a dissemination plan for sharing the evaluation findings across North Wales services.</p>															
1.09	<p>Post Course Evaluation Findings</p> <p>Following the end of Welsh Government regional funding, the Project Co-ordinator continued delivery locally:</p> <ul style="list-style-type: none">• 109 attendees trained in 2024• 105 attendees trained in 2025 <p>During 2024 and 2025, a total of 24 sessions were delivered with each year consisting of twelve. Findings from feedback show that knowledge of early brain development improved:</p> <table><tr><th>Category</th><th>Pre Course Percentage</th><th>Post Course Percentage</th></tr><tr><td>None</td><td>20%</td><td>0%</td></tr><tr><td>Some</td><td>59%</td><td>6%</td></tr><tr><td>Good Understanding</td><td>20%</td><td>81%</td></tr><tr><td>Very Knowledgeable</td><td>1%</td><td>13%</td></tr></table>	Category	Pre Course Percentage	Post Course Percentage	None	20%	0%	Some	59%	6%	Good Understanding	20%	81%	Very Knowledgeable	1%	13%
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	<p>Further data from the evaluations also shows that the biggest drivers for attending the training are Professional Development (44%), and to improve services (22%).</p> <p>The key aspect of the training that helped with understanding the concept and implications was the brain architecture game with 83 respondents stating it was what they enjoyed most.</p> <p>Out of 214 responses from the attendees, 171 rated the training a nine out of ten or higher, with feedback suggesting that areas for improvement around expansion of the training.</p> <p>Further detail on the data can be seen in the appendices.</p>
1.10	<p>Alignment with the Well-being of Future Generations (Wales) Act and Impact on Early Years Practice</p> <p>The OBS programme is closely aligned with the principles of the Well-being of Future Generations (Wales) Act, specifically through its emphasis on prevention, long-term outcomes, collaboration, and involvement. By supporting trauma-informed approaches, OBS strengthens family support during the early years and is designed with scalability across a range of services in mind.</p>
1.11	<p>Strengthening Early Childhood Practice</p> <p>OBS training reinforces early childhood practice during a vital developmental period, with a focus on enhancing emotional regulation, resilience, and practitioner knowledge. These improvements are strongly associated with better lifelong outcomes for children. By increasing the workforce's understanding of stress, trauma, and early brain development, the training equips staff to provide earlier and more proportionate responses, which helps to prevent issues from escalating to crisis point or requiring specialist intervention.</p>
1.12	<p>Integrated Framework and Collaborative Approach</p> <p>The programme offers a shared framework that brings together objectives from early years, education, safeguarding, and wellbeing, thereby supporting an integrated approach to both the child and family. Delivered in collaboration with Oxford University and with the potential to extend across multiple teams, services, and portfolios, the training promotes partnership working. It encompasses a wide range of roles and practitioners, encouraging approaches that place the child's lived experience and the family context at the heart of decision making.</p>
1.13	<p>Long-Term Outcomes and Community Benefits</p> <p>Improved early emotional regulation and executive function, as fostered by the OBS training, support school readiness, greater engagement in learning, and the development of long-term skills, ultimately contributing to future economic participation. The training is proactive in strengthening resilience and deepening understanding of stress and wellbeing during early childhood, with the aim of preventing longer-term mental health</p>

	challenges. Additionally, it reduces the risk of trauma-affected children being unfairly labelled or excluded. By promoting emotionally safe and inclusive early years environments, OBS supports the development of positive family relationships and contributes to stronger cohesion within communities.
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2.00	RESOURCE IMPLICATIONS
2.01	There are no revenue, capital, or human resource implications for the current financial year. The training has the potential to be a source of revenue generation for the portfolio if regional training approaches as per the recommendations are fulfilled.

3.00	IMPACT ASSESSMENT AND RISK MANAGEMENT
3.01	None.

4.00	CONSULTATIONS REQUIRED/CARRIED OUT
4.01	No formal consultations carried out however please see evaluation data (Appendix 2) for feedback from practitioners.

5.00	APPENDICES
5.01	Evaluation Summary Infographic.
5.02	OBS Evaluation Form.
5.03	OBS Evaluation 2025.

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
6.01	<p><u>Baldwin, J.R. et al. (2021). Population vs Individual Prediction of Poor Health From Results of Adverse Childhood Experiences Screening. JAMA Pediatrics, 175(4), 385.</u></p> <p><u>Danese, A. (2019). Annual Research Review: Rethinking childhood trauma. Journal of Child Psychology and Psychiatry, 61(3).</u></p> <p><u>Reuben, A. et al. (2016). Comparing retrospective and prospective ACEs in predicting adult health. Journal of Child Psychology and Psychiatry, 57(10).</u></p>

7.00	CONTACT OFFICER DETAILS
7.01	<p>Contact Officer: Hayley Wilkes. Early Support & Family Centre Programmes Manager</p> <p>Telephone: 07436750904</p> <p>E-mail: hayley.wilkes@flintshire.gov.uk</p>

8.00	GLOSSARY OF TERMS
	<p>Oxford Brain Story (OBS): Evidence-based framework translating neuroscience of early development into accessible tools and training.</p> <p>ACEs (Adverse Childhood Experiences): Potentially traumatic events in childhood associated with poorer health and social outcomes.</p> <p>Trauma-informed practice: Approach that recognises and responds to the impacts of trauma, prioritising safety, choice, and empowerment.</p>