An analysis of the economic impact of Playwork in Wrexham – May 2016





Un o fentrau Llywodraeth Cymru Welsh Government Initiative





Table of contents

Executive Summary

1.	Introduction	5
2.	Methodology	6
3.	The Play Settings - Core and added value provision	9
4.	Literature and data review	12
5.	Fieldwork findings	21
6.	Behaviours observed, resulting benefits and appropriate	27
	metrics	
7.	Costs and Benefits calculation	30
8.	Results - Cost/Benefit ratio	36
9.	Further research	37

Appendix 1 - Case studies

Appendix 2 - References

Appendix 3 - Logic chain and Benefits Matrix

EXECUTIVE SUMMARY

This report provides an evaluation of the economic impact of playwork investment funded by the Communities First programme in Wrexham. It considers the range of benefits obtained by children, young people, their families and the wider community as a result of investment in the provision of staffed, open access play provision. The study has focused on the impact of playwork in three main locations - "The Venture" and "Gwenfro Valley" in the Caia Park area and "The Land" at Plas Madoc.

The focus for the evaluation has been on the contribution of playwork to three key issues - developing social capital, improving current and future employment prospects and tackling poverty outcomes. Assessing the value of this contribution in terms of an overall cost/benefit analysis required use of recognised methodologies for calculation of specific benefits, where these were available.

The duty on local authorities to consider play sufficiency and the goals of the Well Being of Future Generations (Wales) Act also provide the policy context within which the evaluation has been considered.

In order to identify benefits, a range of primary and secondary research has been undertaken including a review of literature, interviews with current and former users of play settings, focus groups with children, parents and carers and a review of programme performance monitoring data provided by the organisations delivering the play provision.

The field work identified an extensive range of benefits in terms of contributions to individual development, family cohesion and community well being. These benefits were categorised through the use of established frameworks in published literature for measuring the impact of youth interventions and measuring the economic value of play provision. The average contact between a play setting and a child in Wrexham is 7 years and this time period was used to calculate overall programme costs and benefits.

Five main areas of impact were considered robust enough, in terms of the data gathered and assessed, to enable a calculation of their economic value using Treasury guidance - Improvement to health through increased physical activity; educational attainment (with deferred benefits in terms of wage levels); reduced crime; reduction in benefits claimed and impact on adult mental health.

A wider range of benefits connected with improving social capital were evident from fieldwork along with indirect impacts on potential reductions in domestic violence, drug and alcohol misuse. These could not be measured in economic terms as part of this study due the absence of local data or confidence in a sufficient level of attribution of the contribution to these by playwork.

The study's overall calculation of a cost benefit ratio for playwork investment in Wrexham identifies a 1: 4.6 ratio ie. for every £1 invested in playwork £4.60 in immediate and deferred benefits result.

It must be noted that this figure is based on <u>measurable benefits</u> within the scope and timescales for this study and as such underestimates the overall impact of the play settings on children, young people and the wider community.

The report concludes with recommendations regarding future research and the need to undertake a longitudinal approach to tracking impact over 5, 10 and 15 years, establishing a control group and reviewing data collection of beneficiary experience in order to provide further robust impact data as the programme progresses.

1. Introduction

This report outlines the results of a summative evaluation of Playwork in Wrexham undertaken on behalf of the Communities First Support service in response to the following brief:

"In terms of return on investment, carry out an economic analysis of the social benefit of playwork provision, exploring any immediate and deferred benefits to people from developing social capital and improving their current or future employment prospects (particularly those attributes that employers find desirable); and any savings due to avoided costs for statutory partners through prevention, as a consequence of people having access to regular and sustained playwork provision."

Communities across the UK prioritise the provision of opportunities for play as the most visible expression of a commitment to the quality of life of its local children. Investment in enabling children and young people to gain physical and emotional development through interaction with peers and the wider environment is recognised as a fundamental part of the growth of well rounded, positive members of society.

Extensive assessment of the physical and psychological benefits of play have been undertaken with a focus on the role of "playwork" as a profession enhancing the inherent benefits of the physical experience of play equipment, securing a specific further contribution to a child's physical and emotional development. The Play sufficiency duty placed on local authorities creates a new focus on the quality, value of provision from the child's perspective and any resulting return arising from increased investment in terms of wider community benefits.

There has however been less attention paid by literature to assessing and measuring the wider societal benefits of play and playwork. This limits a wider appreciation by funders of playwork's contribution to the economic and social development of individuals and sustainability of communities. The challenges in evaluating the impact of playwork are connected with the level of attribution to any current impact on skills, behaviours and outcomes along with the projection and quantifying of future benefits which may be realised some years after contact with playwork itself.

This report considers the immediate and deferred benefits of the investment placed by a range of partners in playwork provision in areas of Wrexham. The scope of provision in Wrexham is acknowledged as being amongst the best provision in Wales in terms of quality of experience and enabling access to a supportive play environment. The report considers the wider impact of the provision in terms of developing social capital, improving current and future employment prospects and tackling poverty outcomes, particularly those in relation to increasing current and future employability.

2. Methodology

At the core of our approach, in responding to the brief, has been the Treasury Green Book methodology for appraising economic and social benefits of public intervention. Central to this is the deployment of a matrix approach to calculating the monetary value of specific types of benefit and, as a result, the overall impact in terms of a projected cost/benefit ratio.

The key stages of the methodology involved:

- constructing an initial assessment of key anticipated benefits by undertaking a literature review;
- a review of immediate data provided by the settings, outlining usage to help validate the scope of benefits;
- an extensive programme of engagement with users of the play settings, including former users, parents/carers and other stakeholders;
- A resulting calculation of overall benefits as compared to programme costs.

Data/Literature review

An interrogation of the data collated by the playwork settings was undertaken enabling a calculation of the scale of immediate benefits (numbers of users, ages etc). The literature review then further informed the range of potential benefits linked to contact with playwork and has helped place the findings from the study in a published context, to help inform future decisions on supporting provision.

Benefits matrix

As the benefits accruing to current and former users of the play settings became evident from undertaking the field work and the literature review, a benefits matrix was developed outlining the type of benefits linked to three key study outcomes. The matrix sets out the calculation method for each benefit, the levels of attribution and deadweight discounting applied in each case and details a projected benefit amount in each case, using the multiples provided by project usage monitoring reports for 2015/16. An initial version of the matrix developed from discussions with the study team and these discussions along with the literature review was used to inform the scope of questioning in the fieldwork. This ensured appropriate data was gathered from interviews and focus groups to inform calculation of benefits. Each benefit type has therefore only been included where the calculation can be validated and referenced to fieldwork, monitoring reports and the literature review. We identified a range of potential benefits that were unable to meet these standards due to limitations or risk of accuracy of data at the levels required.

Engagement programme

Given the nature of the target group, children, young people and their families, we undertook a wide ranging programme of beneficiary engagement using a range of suitably diverse methods, these were designed towards collating sufficient feedback to validate key benefits and enable the calculation of the monetary value of the benefits.

Given the focus of the study around participation in play provision contributing to the three types of outcome:

- Development of social capital;
- Current and future employment prospects;
- Tackling poverty outcomes, particularly current and future employability.

The structure of questionnaires and workshops contained an emphasis around these areas. The nature and style of questioning and discussion also varied according to the age range of beneficiary interviewees.

In addition to capturing information at the settings themselves, we engaged with local people in a range of non-play settings to secure a more objective picture of participation benefits outside of interviews with direct beneficiaries.

A wide range of engagement techniques were undertaken -

- structured questionnaire completion groups in 3 primary schools with assistance of teachers/learning assistants;
- Face to face interviews on site at each play setting;
- Parent/carer interviews (school gate);
- Two focus groups in each location with children and parents/carers using a graphic artist.

The primary schools who participated were those co-located with the various settings.

In total we have engaged with over 300 children and adults during the study.

Case study identification

Throughout the engagement effort we sought to identify some specific case studies, individuals and families, to help illustrate the economic value and social benefits obtained from participation in play provision. In all we interviewed 25 former users of the play settings who had gone on to further education or employment determining the skills and behaviours, linked to their past contact with playwork, they considered had helped them secure opportunities.

Analysis of engagement feedback

Following completion of the engagement programme we then synthesised engagement data with the monitoring data, as a multiplier, apportioning as a result, monetary values to each heading in the benefits matrix.

Benefits calculation

Following endorsement of the synthesis work by the study steering group we further assessed the integrity of the data in informing a final calculation of key benefits and developed a cost/benefit assessment for the programme overall.

Contact with Employers

Our original intention was to contact local employers regarding their views on the skills and behaviours they look for in prospective staff. We sought the cooperation of former users in gaining their permission to speak to their employer and while we were able to do this a few cases, the majority of contacts provided were unable to provide useful feedback. We therefore used "All Wales Skills Needs" information to identify the skills employers' value highest and relate these to the skills and behaviours developed at the play settings.

3. The Play settings – Core and added value provision

It has been crucial in undertaking this evaluation to gain a detailed perspective on the operations of the respective play settings. In parallel with undertaking interviews with users, former users, partners and carers, we have undertaken extensive discussions with staff and visited each setting to view operations on at least three separate occasions during the fieldwork period. One of the several outreach play settings operated by AVOW was also visited, to appreciate the value of this type of model in delivering similar benefits to the "fixed" settings.

On initial inspection each of the settings are dominated by the presence of the play grounds themselves. This is further reinforced by their distinctive "adventure playground" nature, unusual in itself in a discipline dominated by provision of fixed play equipment with little, if any, scope for shaping the environment.

Core Play provision

In terms of the core play provision the settings open every afternoon and evening after school during term time, at weekends and every day during school term holidays. Children are encouraged to play and playworkers perform a "relaxed" supervisory, supportive role, joining in with games organised by the children or enabling organisation of games and activities, to include those finding it difficult to engage with the facility or other children. The study findings highlight the close relationships playworkers develop with the users, sometimes over many years, enabling a familiarity and trust other professionals find it difficult to establish. The scope for trying something new, being creative and learning to take managed risks makes the play experience in these settings feel very different to those offered by standard unstaffed play provision.

Added Value provision

In addition to the core play provision each fixed setting offers a range of what can be termed *added value provision* which results from the ability of the play setting to act as focus for contact not only with younger children, but also older, teenage users their parents and carers. This wider, community development role encompasses individual advice and support, signposting and access to other services, visits and trips, local fundraising and organising support and learning groups. In areas where information fluency may be weak but community identity is strong, the presence and value of this type of bespoke support is extremely important and is borne out by the fieldwork findings and benefits calculations described later.

Brief descriptions of each of the three settings are detailed below:

The Venture

The Venture is an adventure playground located in the Wynnstay ward of Caia Park, Wrexham. Established in 1978, The Venture is by far Wrexham's longest surviving

staffed playground. In addition to the playwork provision on the site, The Venture also delivers a range of other complimentary services aimed at addressing the needs of children and families within the local area.

The Venture has attracted considerable capital funding over its 38 years to build a large purpose built Integrated Children's Centre and a very large adventure playground with a host of facilities, structures and areas including a MUGA, nature area, BMX track, early years area, car parks, workshops, castle with art room, chill out room and large covered area for use in inclement weather. There are extensive play structures, including swings, slides, walkways, tree houses, fire pit hut, ship and castle. There is also considerable storage capacity which houses extensive equipment such as bouncy castles, sports and camping equipment, tools, building supplies and equipment, bikes, canoes and motorbikes. Many additional activities are held in the building - cooking, dance, drama, art and craft, yoga, etc. which attract more children and young people especially during poor weather. The building also allows many other complementary services to be run at The Venture such as Flying Start, Youth Club, Communities for Work, welfare benefits advice, health advice and education services, training courses, children's library, homework club, one to one mentoring, adult literacy, TAC meetings, tenants meetings, housing advice, etc. The building also provides toilets for users of the wider site, storage, offices, meeting rooms and training facilities.

The VAL project (an alternative curriculum project) based at The Venture works with young people at risk of becoming NEET and has supported 142 year 10 and 11 pupils over the last 3 years - 100% of which have gone on to further education or employment.

The staff team at The Venture comprises a range of full and part-time playwork professionals, site management and administrative functions and project specific posts linked to Families First and other local projects.

Gwenfro Valley

Gwenfro Valley Adventure Playground is located in the Queensway ward of Caia Park directly behind Gwenfro Primary School. The playground was established in 2006 to address an identified need for additional staffed play provision at the other end of the Caia Park estate. In 2011 this organisation took on the management of an additional project in the Hightown area, located on the Brynycabanau Play Area. Whilst Gwenfro Valley Adventure Playground works closely with other service providers in the local area, all of their funding is targeted at the delivery of playwork provision.

The Land

AVOW (Association of Voluntary Organisations Wrexham) has a dedicated play department which is responsible for the delivery of playwork services across a total of eight communities including the Llay, Gwersyllt, Brymbo, Gwenfro (Brynteg), Pant, Pen-y-cae, Plas Madoc and Cefn Mawr wards. AVOW initially took over the management of existing playwork projects in Plas Madoc and Gwenfro (Brynteg) in 2011 but then soon secured funding to deliver services across the entire Communities First Urban Villages cluster in Wrexham.

The team currently facilitates up to 18 sessions per week (Monday to Saturday) throughout the year (including term time and school holidays) with each session lasting approximately two hours. This provision includes running a permanent adventure playground in Plas Madoc (The Land), which has been the focus for this evaluation and facilitating between two to four playscheme sessions on public open spaces within the other communities.

Again this team works closely with other services (both within and external to AVOW) however all of their funding is dedicated to the delivery of playwork.

4. Literature and data review

In order to determine the range of benefits arising from playwork investment in Wrexham we needed to establish a theoretical evidence base which outlines agreed benefits, as defined in published literature. In order to then calculate the value of those benefits we examined the volumes of beneficiaries and where possible the evidence of local data impact on issues linked to the benefit (e.g. crime reduction, educational attainment).

Literature

There is a wide range of literature which evidences the physical, personal development and emotional development benefits of play participation. Examples of studies that set out social, physical and psychological benefits of play are:

- "The Play Return: A review of the wider impact of play initiatives" -Tim Gill 2014
- "People make play: the impact of staffed play provision on children, families and communities" Joost Beunderman 2010
- "Quantifying the social impacts of Culture and Sport" Fujiwara ,Kudrna & Dolan 2014

Literature which assesses and monetises the economic and community benefits of playwork is at more of a premium, indicating a need for further research in this area.

Benefit calculation

Two main pieces of research have informed the method and reference points for calculation of benefits in this evaluation.

"Play England – an economic evaluation of play provision"- Matrix evidence - 2010

This study assesses the economic value of social benefits arising from two distinct types of playwork, including adventure playgrounds, comparing average costs of provision against an estimate of benefits, focused on health and educational outcomes. It also considered the economic value of after school clubs staffed by trained play personnel as compared to clubs staffed by non trained staff. The key messages from this piece of work were that:

The benefits generated by an adventure playground compared with no playground exceed the costs by £0.67 million.

Every £1 invested in an adventure playground generates £1.32 in social benefits.

The economic models used to calculate the benefits in this study are consistent with the methods recommended by Treasury Green Book.

"Supporting public service transformation: cost benefit analysis guidance for local partnerships" HM Treasury 2014

This guidance sets out the method for monetising public benefit outcomes, the calculation of costs, calculation of cost-benefit ratio and the standard unit benefits for each outcome.

Defining and attributing outcomes

Two further useful pieces of work in outlining approaches to establishing and measuring outcomes for youth interventions have also informed the schedule of benefits calculated in this study.

The Future for Outcomes: a practical guide to measuring outcomes for young people, published by the NYA and **The Future for Outcomes – The Calculator in practice** NYA- both 2012

This study provides support to authorities seeking to measure the impact of youth interventions and also provides an example template matrix against which to validate Treasury calculation models. Consolidating findings from models of youth work evaluation across a range of locations in England it advocates the use of a range of "Capability Clusters", illustrated overleaf, in gathering and assessing evidence. The wider the range of measurable benefits, the more robust the evidence base. We developed and refined our research methods using this framework to ensure we captured information on as wide a range of benefits as possible and have assessed the quality of our research findings against the methodology in the study, prior to including any specific benefit calculation.



Clusters of Capabilities – Young Foundation 2012

An analysis of the economic impact of Playwork in Wrexham – May 2016

Inspiring Impact – The journey to employment – A guide to understanding and measuring what matters to young people – including the Journey to Employment (JET) framework - John Copps and Dawn Plimmer -May 2013

This study focuses more specifically on employability and provides a useful "Journey to Employment" framework outlining the *intrinsic* factors individuals need in order to secure quality, sustainable employment. In the fieldwork we focused on securing evidence from current and former users of the play settings, their parents/carers to establish the levels at which these intrinsic factors were present, were informing or had informed their "journey".



Journey to Employment Framework - Inspiring Impact - Copps and Plimmer 2013

EMOTIONAL CAPABILITIES	QUALIFICATIONS, EDUCATION + TRAINING
Self-esteem	Basic skills
Autonomy and control	Achieving qualifications
Grit and determination	Attendance and behaviour
Empathy	EXPERIENCES + INVOLVEMENT
ATTITUDES	Work experience
Aspirations	Perception of value of work experience
Attitudes to work	Networks
EMPLOYABILITY SKILLS	Community involvement
Teamwork	CAREER MANAGEMENT
Communication	Career direction
Problem solving	Job search skills
Self-management	Presentation to employers
Leadership	
PERSONAL CIRCUMSTANCES	EMPLOYMENT
Access to transport	Entry into employment
Access to the internet	Sustaining employment
Access to childcare	Quality of employment
 Access to support for young carers 	Satisfaction with employment
Access to support for disabled people	
Reduced substance abuse	
 Reduced offending/anti-social behaviour 	

Indicators of the factors informing sustainable employment – Inspiring Impact - Copps and Plimmer 2013

This work aligns well with an approach under development within Communities First in Wrexham looking at five stages of employability. Notably the contribution playwork makes to the first three stages of:

Stage 1 "Engagement, Assessment and Personal Planning" - the activity supports the engagement and involvement of children, young people and parents in the Play Provision itself and the wider Communities First programme.

Stage 2 "Barrier Removal / Reduction" - the activity supports the improved mental and physical wellbeing of children & young people, which better prepares them for adult life and reduces the chances of limiting conditions that would affect attendance at school and uptake of training and employment opportunities.

Stage 3 "Training and Vocational Activity" - the activity supports volunteering opportunities in support of the project for both young people and parents. Training is available through the project for parents.

As part of Community Benefits work undertaken by Wrexham County Borough Council, a cross section of local employers has been contacted to establish key attributes required in their workforce. These are not skills-related attributes, rather they are personal qualities that can be potentially developed and enhanced through the appropriate delivery of Playwork.

These Employability-focused attributes include: resilience, drive (make things happen), communication, flexibility, confidence, self-awareness, creativity, negotiation, decision making, work confidently within a group, independence, stress tolerance, interpersonal sensitivity (empathy), integrity.

Assessing the contribution of playwork to developing these attributes is a key focus for this study. The findings from the fieldwork set out in the next section of the report and in particular the graphic capture of children's, parents and carers comments, set out on pages 18-20, evidence the tangible benefits being obtained from playwork, in terms of intrinsic skills to assist future employability.

Data

In assessing quantitative impact we have reviewed two main forms of population data for the study:

- 1. The beneficiary information provided by the play settings over the last two financial years 2014/15 and 2015/16
- 2. The topic related data for the LSOA catchment and neighbouring comparative communities on issues such as crime reduction, educational attainment and health

The volume of beneficiaries of the settings in 2015/16 has provided the source number for multiplying immediate or avoided costs.

Area data such as the local crime data (illustrated below) provides the background evidence to applying specific types of benefit calculation, e.g. Comparative number (%) of crime reports (criminal damage, anti- social behaviour) as they can be reasonably attributed to playwork investment.

POLICE.UK

Click on the dots on the map for information about individual crimes.



Reported incidents of crime in area Caia Park area - March 2016



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5. Fieldwork findings

This section of the report summarises the research findings obtained from the range of engagement techniques undertaken as part of the evaluation. Set out immediately below are the key overall findings from three main categories of stakeholders contacted:

- Children
- Parents and Carers
- Former beneficiaries, employers and other stakeholders

Children

During the study we interviewed 138 children face to face using a structured part self selection/part narrative questionnaire. All these interviews took place on site at the play settings during play sessions. They were held in each location on different days of the week, over a period of 1 month, in order to capture a wide cross section of play settings users.

The purpose of the visits to undertake the interviews were to observe, first hand, the types of play activity taking place and the dynamic between playworkers and service users. These observations also acted as validation of the responses provided to the face to face questionnaires.

The questionnaires sought to gather feedback on what type of activities the child undertakes at the play setting, their preferred activity including a justification of this and details of their relationships with friends, peers and playworkers at the settings.

Completion involved an informal, voluntary face to face interview following a brief explanation of the purpose of the research. The majority of children were happy to share their views and answered questions enabling useful feedback on their motivation for attending, and descriptions of their time using the facility, in terms of emotions experienced and activities undertaken. Approximately 20% of the interviews developed into a more in depth discussion about the child's wider background and family situation, relationships with others, plans for the future and how they thought the play setting helped with these.

These interviews provided an extremely rich source of in depth detail around the evidenced benefits of attendance, the resulting impact in terms of attitude and behaviour outside the setting and crucially the contribution to the focused outcomes for the evaluation.

The types of activities (group games, use of equipment, creating structures, fire management, use of tools) and one to one personal development (leadership, communication organisation, prioritising, respect) described in interviews and observed at the settings were consistently apparent across each of the settings and during each separate observation.

The evidenced types of behaviours and benefits emerging from the observation and interview fieldwork therefore included:

- Improved communication with friends, peers and adults
- Physical activity
- Decision making
- Risk management
- Leadership
- Negotiation skills
- Team working with each other and playworkers
- Mindfulness
- Emotional control
- Respect for opinions
- Conflict resolution

The role of the playworkers in being present but not all pervasive, supportive but not controlling, joining in but not taking over was particularly interesting. Positive relationships with all the children attending and evidence of long term, friendship and counselling style relationships were clear and borne out in interviews and observations. The skillsets deployed in gaining a child's trust, encouraging their development and providing proportionate and timely support in meeting practical and emotional needs, are highly sophisticated, but delivered in a relaxed, friendly and informal way.

It was clear some children valued and needed these relationships more than others, as some our case studies (appendix 1) confirm, but all benefit from the permissive and reassuring environment created.

Analysis from 90 questionnaires completed by primary school children linked to each of the three settings reinforced these findings but lacked the in-depth outputs obtained by face to face interviews.

A focus group was also held with children at each setting using the services of a graphic capture artist - the feedback from each of these sessions also further validated the findings from individual questionnaires.

Parents and Carers

In assessing further the direct impact on children and the wider potential benefits to families and the community of funded playwork in Wrexham, we undertook to contact parents and carers of current and past users of the play settings.

School gate interviews – We were grateful to the local primary schools for allowing us to approach parents for face to face interviews at drop off and pick up time.

We interviewed 45 parents using this method across the three sites and gathered a consistent picture of perceived benefits to the children and the wider family of attendance at the play settings.

Parents reported children as being more confident, more outgoing, finding it easier to mix with friends and siblings, being healthier and spending less time in front of the television and computers.

During these interviews a number of former users who had gone on into employment or training were identified and the role of the playworkers and play settings in providing a safe, supportive environment for children and their parents were emphasised. Regular reports of playworkers providing signposting advice and support with service access, job search and benefits advice were forthcoming.

Focus groups – Focus groups with parents and carers were held at each setting, again involving graphic capture, and these further re-inforced the messages emerging from engagement with children and the school gate interviews.

The parents and carers focus groups also provided a number of case study examples of older children who had benefited from provision in the past, gave details of their current achievements and their views on how play provision had helped them in their development.

It was also clear from the focus groups that the playworkers clearly acted in a supportive and advisory role for parents, as much as their children, and as a result choices regarding access to services/return to education or work had been influenced.

The main benefits to current service users highlighted by parents and carers in the focus groups included:

- Improved ability to make friends
- Happier disposition
- Exercise and resulting fitness
- Increased knowledge
- Knowing limits
- Increased ability to calculate and take risks
- Using imagination
- Respecting danger
- Learning how to cook safely
- Helping out with chores at home
- Better at school work

An analysis of the economic impact of Playwork in Wrexham – May 2016

Former beneficiaries, employers and other stakeholders

Within the timeframes provided by the study timetable we have interviewed twelve former users of the play settings. The contacts were provided by the play settings and via school gate interviews. In each case, those interviewed identified a wide range of benefits which they attributed, in part, to skills developed from time spent at the play settings. Interviewees talked about experiences around not doing so well in school but finding what they liked to do ("were good at") through contact with the play settings.

Being given the time and space to be themselves, find out who they were and make a plan for the future with the support, in particular, of playworkers was seen as very influential in helping "to stay on the right path".

Development of core skills, being given responsibility and being trusted from a young age all had a major influence on their ability to develop and sustain relationships, be resilient when confronted with challenges and deal with what the world of work demands, getting on with people, working as part of a team, ability to follow instructions and react to change in a positive way.

All those interviewed also reported continued participation in organised physical activity into adulthood.

It was striking that there were a lot of examples of former graduates of the play settings now being involved in playwork in various forms. They reported being inspired by playworkers when they were young and wanting to give something back to the community.

Those interviewed also identified a group of three young men, former users of the play settings who now travel the world advising on the installation and use of play equipment for one of the UK's leading play equipment and installation companies Soft Brick LTD.

The company's operations manager confirmed that these employees knowledge of what children enjoy from play, grounded in their past experience from play settings in Wrexham made for a fantastic asset for the company and the interpersonal and practical skills they possessed differentiated them from other applicants and workers. He identified them as the company's "crack team" who they use for their high value clients and projects.



in-depth interviews with From playworkers at the settings and on site visits it is clear the settings interact with a wide range of other stakeholders who have contact with the children using the play settings and the wider community. North Wales Police highly value the presence and relationship with play and acknowledge their settings contribution to reduced levels of criminal damage and anti-social

behaviour in the immediate area as compared to neighbouring communities with similar socio-economic profiles.

Children's Services staff also interact closely with the settings and reported significant changes in cases under their care following regular attendance at the play settings. Links with local primary schools were mixed between the three settings but all had a constructive and developing relationship with neighbouring primary schools who valued the proximity and opportunity to interact with individual playworkers around the educational development needs of specific children.

Secondary schools, FE colleges and training providers liaise closely with the Venture Alternative Learning programme which works with young people in years 10 and 11, who are at most risk of becoming NEET (Not in Education, Employment or Training). There are a variety of different courses which offer qualifications to support young people to move into further education or employment. The VAL project currently works with young people from Rhosnesni High School and is in the process of linking with other schools in Wrexham. The courses are run by a number of different staff at the Venture and include: Joinery, Plumbing, The Prince's Trust, Hairdressing and Arts and Crafts.

Communities First

The projects attract a significant proportion of their funding from the Welsh Government funded anti poverty programme - Communities First. In addition to contributing to the local "Employability model" referred to earlier these projects are seen to be contributing to a range of the programmes objectives including:

- Promoting Mental Wellbeing
- Promoting Physical Wellbeing (ages 7 and above)
- Promoting Family Learning

In terms of promoting greater "Community Involvement" playwork is also seen to contribute to helping people in terms of being: "Engaged in more community activity and reduced social isolation".



Links between type of activity at evidenced play settings and resulting outcomes in adulthood

These findings are now categorised below, as they relate to the three main areas of benefit to be explored in the evaluation:

- > Contribution of playwork to developing Social capital
- > Contribution to participants Current and future employment prospects
- Contribution to Poverty reduction, particularly in terms of increased employability

In doing this we have also translated any significant benefit identified from fieldwork into a "capability" benefit as outlined in literature (improved resilience, communication, etc.) then aligned these with a relevant measurable robust metric (health, education benefit) for subsequent calculation as monetised benefits in Section 6 and an overall cost/benefit ratio in Section 7.



6. Behaviours observed, resulting benefits and appropriate metrics

Fieldwork findings have established the range of behaviours and outcomes experienced by current and former users of the play settings, playworkers, parents and carers and other stakeholders. We have then considered the main benefits of youth interventions as reported in literature as they apply to the evidence captured at the play settings, notably the impact on:

- Individual achievements and behaviours
- Benefits to society
- Social and emotional capabilities
- Interpersonal relationships

Each of these also aligns with the *social capital*, *individual employment prospects* and *poverty reduction* assessment objectives set out in the brief for the evaluation. This section of the report considers each area of benefit in turn, sets out a summary of the fieldwork evidence to support it and confirms the potential metrics to be used in calculating a monetary benefit.

Individual achievements and behaviours

- Literacy, numeracy and language development
- Attainment of qualifications
- Participation or attendance in learning and/or work
- Participation in youth activities and uptake of advice/support services
- Individual choices and behaviours that affect health and well being

From interviews with current users, former users, playworkers and other stakeholders that improvements in terms of individual's achievements and behaviours were clear, particularly in terms of participation in youth activities and choices affecting health and well being. Schools reported improved attitudes amongst those they had referred to the play settings and resulting improvements in literacy, numeracy and language development.

The child centred approach taken by the playworkers is sensitive to the specific challenges they face and children are encouraged to undertake activities at the play settings or take steps outside the setting which address identified needs eg. Group games to improve communication and interpersonal skills.

Individual achievements and behaviours - Potential Benefit metrics

- Educational attainment economic model Matrix 2010
- Increase from NVQ 2 to NVQ 3
- Increased annual earnings

Benefits to society

- Less need for health services
- Contribution to economy through labour market participation
- Less dependence on welfare
- Not subject to criminal justice system
- Strengthened community through leadership and democratic participation

The informal/adventure style nature of the play settings contributes to enhanced physical activity during use and an increased likelihood of sustained physical activity into adulthood. Former users reported their continued involvement in team sports and individual fitness due to their introduction to these whilst using the play settings. Observations confirmed that current users spend around 40% of time spent during an average two hour visit engaged in enhanced physical activity, e.g. jumping, climbing, running.

Participation in the labour market and less dependence on welfare have been drawn from interviews with former users who are in full time work.

Discussions with and data from North Wales police confirmed lower levels of antisocial behaviour and criminal damage in the areas with play setting locations.

The numbers of former users active in the community, either through continued contact/employment by the settings and in one case as a local ward member evidences the commitment to the community instilled via historic engagement with the settings.

Benefits to society - Potential Benefits metrics

- Increased physical activity model Matrix 2010
- Reduced benefits claims Job seekers Allowance
- Reduced crime and anti-social behaviour

Social and emotional capabilities

- Communication
- Confidence and agency
- Creativity
- Managing feelings
- Planning and problem solving
- Relationships and leadership
- Resilience and determination

Current users reported all these behaviours through their descriptions of the type of activities undertaken while at the settings and their resulting relationships with peers and playworkers. Past users reflected on how these behaviours were learnt via contact with the setting and gave examples of where these have been deployed in their relationship with the wider world - friends, partners, employers, their own children.

Increased resilience came across a key characteristic from all those interviewed, being able to cope with challenges and find constructive ways forward were seen as a consistent benefit by all.

Social and emotional capabilities - potential benefits metrics

• Improved adult mental health

Inter-personal relationships

- Positive parenting
- Positive family relationships
- Community cohesion

The feedback from the school gate interviews and the parents and carers focus groups confirmed the positive effect on family relationships arising from children attending the play settings. Improved relationships between siblings, better communication skills, release of energy and health were the most commonly reported benefits. The use of play settings as an informal meeting place for parents, a place where community issues were discussed ,solutions explored and individual support being provided for adults as well as children also featured heavily in feedback.

Inter-personal relationships - potential benefits metrics							
	Reduced Domes	tic violence					
	Reduction	of	Children	in	care		

7. Costs and Benefits calculation

Having established the key benefits from published literature, the fieldwork evidence to support their presence in Wrexham, the resulting impact on current and former users of the playwork settings and the potential metrics for calculating monetary benefit, this section of the report describes the method of calculation of overall programme costs and programme benefits. The calculations are also described in Appendix 3.

Overall approach

The approach we have taken to appraising/evaluating the success of playwork in Wrexham is to compare the projected additional outcomes achieved by the project with the additional costs of delivering the project.

In order to do this we have had to establish:

- have a comprehensive view of both the costs of providing the services offered by the project, and also the outcomes predicted/achieved from the project; and
- 2. make an assessment of the costs and outcomes that would result if the project was not to take place (known in technical terms as accounting for deadweight).

For the purposes of establishing the pool of beneficiaries to calculate immediate and deferred project benefits we have used the usage monitoring data provided by the play settings for 2015/16.Similarly we have used the programme funding for 2015/16 as the base cost figures.

Given our fieldwork indicates an average contact time with the play setting of 7 years both of the figures will be multiplied and discounted, where appropriate, to reflect this time period.

Costs

For the purposes of the assessment we have used the Communities First funding figures for each of the three main play providers in 2015/16

•	The Venture	£121,552
•	Gwenfro Valley	£ 53,174
•	AVOW including The Land	£118,500.
	Total	£ 293,226

The beneficiaries at each location for 2015/16 were:

- The Venture 1,090Gwenfro Valley 1,374
- AVOW/Land 1,005
 - **Total** 3,469

This represents a headline per beneficiary cost of $\underline{\pounds 84.53}$ per year. Given, as previously stated, the average reported contact with a beneficiary is 7 years, the overall programme cost per beneficiary, discounted for inflation, based on these figures is $\underline{\pounds 592}$. The amount of time spent with each beneficiary related to their age, specific needs and frequency of attendance clearly varies. Fieldwork indicates an average user attends twice during the week for an average of 2 hours and once at weekends for 4 hours.

Benefits

An adventure playground provides a good quality play space for children to take risks, explore and experiment. The type of play an adventure playground encourages promotes the healthy development of children - physically, emotionally, mentally, socially and creatively.

In the short run an adventure playground promotes children's physical activity and social play. How can these benefits quantified in monetary terms? It is estimated that in the long term these short-term effects will lead to improved health and educational outcomes. Increased physical activity in childhood is associated with higher levels of physical activity in adulthood, which in turn decreases the chances of experiencing a number of diseases including coronary heart disease, stroke, type II diabetes and colon cancer.

The monetary benefit of reduced incidence of these diseases is measured in terms of healthcare cost savings and increased quality adjusted life years (QALY). Similarly, it is estimated that the effect of an adventure playground on social play has a positive relationship with education Key Stage 1 attainment. Key Stage 1 performance is likely to predict Key Stage 2, which is a determinant of Key Stage 3, and in turn, GCSE performance. The monetary benefit of improved GCSE performance is estimated by the associated increase in adult earnings.

Increased Physical Activity

The short term physical activity effect estimated from the literature is an increase in the proportion of children doing at least moderate activity by 8.16%. The effect size is then applied to a baseline distribution of children by physical activity levels compiled from interviews with users and playworkers and observations to see the positive impact of the setting.

The distribution by physical activity was obtained from the Health Survey for England (2011), based on which 57% of children achieve a moderate physical activity threshold. Applying the effect size, it is estimated that post-intervention the percentage of children achieving the moderate physical activity threshold increases from 57% to 62%.

Previous research has shown that physical activity in childhood can be used as a predictor of physical activity in adulthood. Based on Telama *et al* (2010), it was estimated that children with access to an adventure playground are 1.64% more likely to be physically active in adulthood. This number is based on the odds ratio of being a physically active adult if physically active child (compared to a physically active adult if physically active child) and the proportion of physically (in)active children and adults in the population.

To estimate the health effects of physical activity and their monetary value previous economic research undertaken by Matrix (2006; 2010) was used. Numerous epidemiological studies compare physical activity levels with the incidence of diseases. Based on this evidence, Matrix (2010) estimated the health care cost savings of being physically active in adulthood as £2,110. The quality of life gain - measured in terms of <u>Quality Adjusted Life Years</u> (QALY) - associated with being physically active in adulthood is 1.31 QALYs.

Since children with access to an adventure playground are 1.64% more likely to be physically active in adulthood, the healthcare cost savings in the long term are for £35 and 0.022 QALYs gained per child using an adventure playground. The QALYs gained were valued at £20,000 per QALY, the lower end of the range of QALY values implicit in the decision making process followed by the National Institute of Clinical Excellence (NICE) and commonly used in economic evaluations valuing health outcomes. Therefore, the total long term monetary benefit from increased physical activity including both health care cost savings and the monetary value associated with the QALY gain is £465 per child.

Educational outcomes

Key Stage 1 performance can be used as a predictor of Key Stage 2 performance, which is a determinant of Key Stage 3, and in turn GCSE performance. Thereby the effect of an adventure playground in Key Stage 1 can be translated into improved GCSE performance. Based on this, transition probabilities are calculated to link short term outcomes to long term outcomes in an economic model. Due to the increased performance in Key Stage 1 it is estimated that access to an adventure playground was associated with an increased likelihood of attaining 5 GCSEs A*-C of 2.61%.

Previous economic literature was employed to value improved GCSE performance in monetary terms. Cummings *et al* (2007) estimated the incremental adult earnings per person attaining 5 GCSEs A*-C compared to no 5 GCSE A*-C as £156,863. Since children with access to an adventure playground are 2.61% more likely to attain 5 GCSEs A*-C, this is equivalent to an increase in adult earnings of **£4,096 per child**.

Aggregating the benefit per child to estimate the benefit for all children attending an adventure playground required that a number of assumptions be made:

- Based on interviews with playground managers, at the three settings the average number of children using the play settings regularly at one point in time is 60 children aged between 5 and 12.
- Assuming the variety of children changes by a churn factor of 4, i.e. as one child leaves another new child attends it is estimated that an average of 240 children <u>regularly</u> use each of the three play settings over the course of a year
- It is assumed that the 240 children are distributed evenly between the ages of 5 to 12, i.e. 30 children at each age.
- After one year of attending an adventure playground a child will realise the physical activity benefit; therefore all 720 children attending the three play settings in the first year of contact receive the benefit.
- It is assumed that children between the ages of 5 and 7, which is the Key Stage 1 age range, are eligible for the education benefit.
- After three years of attending an adventure playground a child will realise the education benefit; therefore 30 children receive the education benefit at each setting (90 across three settings).
- In each subsequent year (a further four years for our purposes) of the model children who will turn 5 are eligible for both the education and physical activity benefit; which is 30 children (90 across three settings).
- Using the participation monitoring figures for the three settings, as a result, across the 7 years of average contact of the playgrounds, 450 children will realise the education benefit and physical activity benefit and 840 children will realise the physical activity benefit.

This translates into

£3,440,640 educational benefit

£390,600 physical activity benefit

Crime reduction

Data from North Wales Police indicates reduced level of reporting of criminal damage and anti-social behaviour in the areas of Wrexham where the play settings are located as compared to neighbouring areas.

The costs of dealing with these offences are detailed in the *Supporting public service transformation:* cost benefit analysis guidance for local partnerships April 2014.

- The cost of dealing with an anti-social behaviour incident where further action is required is £653.
- The cost of dealing with a criminal damage incident is £1055.

These are the two major crime types dealt with in the Wrexham area in 2015/16.

The average number of incidents reported by ward in the Wrexham area is 60 per month. In February 2016 in the Wynnstay ward, where one of the play settings is located, the number of incidents reported was 6.

Using an average cost per incident £854 and a reduction of 648 incidents per year we calculate £553,392 per year. In this case we have applied an optimism bias of 40% resulting in an estimated avoided cost of £332,035, minus 20% deadweight gives an estimated saving of £265,628 x 7 years or £1,859,396.

Reduction in benefits claimed

Using the fiscal benefits obtained from non-claiming of Jobseekers Allowance £9,234 and applying the *educational outcome* assumptions of 840 children not claiming JSA and applying the 40% optimism bias and a deadweight of 20%, an estimated saving of **£3,723,148** results.

Adult mental health

There can be no doubting the impact the presence and operation of the Wrexham play settings has on the mental well being of the communities they serve. Interviews with former users identified the strength of character, resilience, motivation and problem solving skills they attributed to their time spent at the play settings. Interviews with parents and carers highlighted the positive impact on children's behaviour towards other siblings and on family relationships following time spent at the settings. The reassurance of knowing children were playing in a secure but not oppressive setting with the support and supervision of the playworkers was also seen an important benefit in terms of parent and carers mental well being.

- The public value benefit of reduced mental health problems (anxiety/ depression) is £4670 including service costs and lost earnings (Supporting public service transformation HM Treasury 2014).
- 1 in 4 people have a mental health problem (Office for National Statistics, Psychiatric Morbidity 2007).

Applying this statistic to the numbers of beneficiaries metric for educational and physical activity benefit (840 children - 25% of these at risk of mental health) and also applying rates of optimism bias (40%) and deadweight (20%) a figure of £117,784 in reduced adult mental health problems can be determined.

Social Capital

A wide range of benefits associated with what is generally termed development of "social capital" were identified during the fieldwork. Parents and carers, former users and children themselves commented on the wider social role the play settings perform is addition to delivery of the core play offer. Playworkers were seen as helpful points of advice and information, community activities were organised and the opportunity for parents and carers to network with each other through the contact provided by meeting others at the play settings were all highly valued.

Applying a monetary value to these benefits in the case of the Wrexham Playwork programme is challenging. Theoretical frameworks and suggested measures exist to capture the complexity of individual and community relationships. Each of the main types of social capital are clearly evident from the fieldwork findings in terms of personal relationships, civic engagement, social network support and trust and co-operative norms, however literature (ONS 2014 - Measuring Social Capital) indicates applying a monetary value to be problematic at the local level. We have not therefore included a calculation for the monetary value of these in the cost/benefit assessment but acknowledge the impact of the play settings on improving the key elements of social capital as described in Table 1.

Aspect of social capital	Definition				
Personal Relationships	This aspect of social capital refers to the "structure and nature of people's personal relationships" (OECD, 2013), and is concerned with who people know and what they do to establish and maintain their personal relationships.				
Social Network Support	This refers to "the level of resources or support that a person can draw from their personal relationships" (OECD, 2013), but also includes what people do for other individuals on a personal basis.				
Civic Engagement	This refers to "the actions and behaviours that can be seen as contributing positively to the collective life of a community or society" (OECD, 2013). It includes activities such as volunteering, political participation and other forms of community actions.				
Trust and Cooperative norms	This refers to the trust and to the cooperative norms or shared values that shape the way people behave towards each other and as members of society. Trust and values that are beneficial for society as a whole (such as for example solidarity and equity) can determine how much people in a society are willing to cooperate with one another.				

Table 1: The four different aspects of social capital

8. Results – Cost/Benefit ratio

The overall Cost/Benefit Assessment for the programme for a projected seven year period of operation is therefore calculated by considering:

Immediate and deferred public value benefits (monetary value) £9,531,568

Divided by the

Total 7 year cost of the Wrexham Playwork programme £2,052,582

<u>Representing a positive Cost Benefit ratio of 1:4.6 (i.e. for every £1 invested £4.60 in public benefit results)</u>

We used the methods of calculating monetary value of evidenced economic and social benefits outlined in literature. These determined the most robust <u>metrics</u> that can be used to assess and measure the monetary value of the contribution of the Wrexham playwork programme to these benefits.

The contribution of playwork to the economic benefits of increased physical activity and improved educational attainment (Matrix 2010) provide the most robust measures for our subsequent cost /benefit analysis. It should be noted that the resulting cost/benefit ratio should be viewed as an underestimate of the broader benefits that the Wrexham Playwork programme delivers.

9. Further research

The fieldwork undertaken as part of the evaluation represents a snapshot of costs and benefits at the time of the evaluation. In order to capture and assess the full impact of the investment in playwork we recommend the establishment of a longitudinal study, possibly in partnership with a Higher Education institution. Part of the longitudinal study should involve establishing a control group of young people in an area, with a similar socio-economic profile, not exposed to an enhanced playground or play setting offer.

The study would focus on assessing the comparative baseline of attitudes and behaviours in the playwork study locations and in a control group in an area without staffed play provision and track educational and employment outcomes over 5, 10 and 15 years. The study should also consider widening the methods of data collection currently deployed at the settings so as to further validate the benefits being experienced by participants.

Further contact with employers - we also recommend the employers of the former play setting users be approached, alongside the individuals, to monitor their continuing future progress and any continuing influence of their historic contact with the play setting on their learnt skills, attitudes and abilities.

Appendix 1 – Case studies

During the fieldwork interviews for the evaluation with children using the play settings, staff and former users of the play settings who have progressed into employment a number of significant contributions were collated. The overall feedback from all those interviewed provided sufficient evidence of the physical, psychological and personal development is providing and had provided to local young people, enabling calculation of the overall cost/benefit of the playwork investment.

This was reinforced by a significant number (approximately 25% of the total) of more detailed personal stories of the impact contact with a play setting had made on individual's personal development, their current and future behaviours and their life journey. We set out here some examples of these stories categorised between interviews with children still using/in contact with the play setting at the time of the evaluation and past users who referenced their experience of the play setting as contributing to their current position and/or future plans.

Examples of current users aged under 18 have been anonymised. Each of the play settings also provides case study information as part of their monitoring reports.

Current users

Carl (age 16)

Carl had been attending the play setting regularly since he was 7 or 8 years old. Challenging relationships with family members had spilt over into his relationship with teachers at school and he had experienced a series of temporary exclusions. He had developed a close relationship with the playworkers and acted as an unofficial volunteer, facilitating games and activities with younger children and helping over a number of years with construction related tasks such as building dens, maintenance and cutting wood to make and manage fires.

It was clear Carl had improved his ability to interact with authority figures due to the relationships he had developed with playworkers and thanks to their support he had returned to school to sit some exams and was now enrolled on a construction operatives training programme at Coleg Cambria college in Wrexham.

Niall (age 11)

Niall had been attending the play setting for 5 years and spends 3-4 hours a day, 5 days a week playing football, climbing and playing chase games. Niall was keen to share his experience of attending the reading and maths groups held at the play setting once a week. Over a period of 12 months he had become a "free reader" rising from Level 6 and was able to division in maths when he had previously struggled with this. Niall reported that he liked the less complicated way these groups worked and this had helped him do better in s

Sally (age 12)

Sally has been a regular user of the play setting for 6 years along with her younger brothers and sisters. She reported that two of her older brothers who were former users - one was now in the army .She reflected on how she felt safe at the setting and everyone worked hard to make a happy atmosphere. She liked meeting new friends and sometimes found that arguments offered a chance to make more friends. She valued the chance to play physical games and she reported that this was helping her deal with some weight control issues that in the past she had been bullied about in school.

Michael (age 14)

Michael enjoyed playing football and building things during his daily visits. He reported that he had met new friends by coming to play setting and we discussed why some of his school friends didn't join him in using the setting. He felt that the lure of video games meant they spent most of their time after school at home. On observing Michael it was clear he valued spending time with the make playworkers helping them with maintenance tasks.

Daniel (age 8)

Daniel in some ways was a typically average user of the play settings, enjoying playing on the equipment with friends and playworkers during his daily visits. His vivid description of creating a playground game with his friends inspired by a popular video game provided an interesting spin on the creative relationship between technology and young people. Daniel felt the play setting provided the freedom and scope to try new things in a safe place. He also reflected on the differences between traditional play areas and the enhanced playground environment.

Martin (age 9)

Martin was accompanied during his time at the play setting by his children's case social worker. He was in a foster care placement and spent time back at home with his mother with the support of the social worker. The social worker reported the benefits she saw in Martins behaviour and key skills as a result of attending regularly at the play setting which was also contributing to improvements in his performance at school.

Former users

These stories are taken from a cross section of interviews undertaken with contacts provided by the play settings and obtained from school gate interviews. Each agreed for us to use the summaries of their experiences to help inform the evaluation

Nathan and Jamie - Both Nathan and Jamie are playworkers who grew up locally using the play setting and after pursuing other career options are now an integral part of the local team. Both described how the football offer at the play setting was a key motivator and the later opportunity to undertake outdoor pursuits and go camping led

to volunteering during school holidays and subsequently to pursuing playwork as career.

Samantha (age 18) highlighted the role organised football at the play setting had in teaching her teamworking and communication skills. The supportive relationships with playworkers helped overcome a real risk of being excluded from school and volunteering at the play setting has helped her get a local youth work position as well as studying for a youth work qualification

Tony (age 32) works for a large manufacturing plant based on the Wrexham Industrial estate. He remembered the play setting as key to introducing him to football and as a result he still plays regularly. He values the opportunity for outdoor play the setting provides his own children

Zack (age 20) had recently gained construction employment with assistance from Communities First after previous factory work experience. Zack highlighted the social skills he learnt from contact with the play setting and the confidence he developed as being really helpful in his search for work

Wayne (age 35) Interviewed at the school gate Wayne was full of praise for the experience the play setting was giving his children and reflected on his own experience of accessing local semi structured local play opportunities as teenager. Building resilience, dealing with conflict, social skills, managing risks were all characteristics he had seen in his 8 and 10 year old boys.

Overcoming challenges in terms of his own health and family circumstances Wayne was studying for a degree in Education and Childhood studies. He says "play allows you to live in a dream world where anything is possible"

Julie (age 31) attended one of the parent/carer focus groups and highlighted the contribution the play setting was making to her childrens and her own development. Increased use of their imagination and better social skills with confidence to speak to others. Julie had recently returned to further education with the support and advice of the playworkers

Sean (age 28) works a bricklayer and after 7 years labouring is just about to complete his apprenticeship. Struggled in school with dyslexia and despite difficult family circumstances, including the death of a parent during his teenage years retained a sense of confidence and determination which he identified was developed through his time spent at the play setting. He also identified his early experiences at the setting of constructing structures, messing about with motorbikes and going away camping as being key to making him who he is.

Jay (age 35) described his experience as "Growing up at the play setting" with it helping to make him a "well rounded" person. He highlighted the difference in his relationship between school and the staff at the play setting. "Being allowed to get things wrong and find yourself" instilled a sense of confidence which provided a strong grounding for the future. He described the evolution of his time connected to the play setting starting as 8/9 year old finding his limitations and learning what he was good at, being given responsibility (making cups of tea, etc.) at 14/15 and going

away on trips and designing and building spaces at 16. He identified his preference for practical learning and on leaving school with "a few GCSEs" and with the support of the playworker got a college placement to train as a painter and decorator. He also continued to volunteer at the play setting during school holidays. His value placed in the support provided led him, after a few years working in construction, to working fulltime as a playworker and more recently as part of the Play Development Team at Wrexham Council. His view of the play settings as providing "Space for children to just enjoy themselves" informed by his own experience and his professional practice was a key message from his interview.

Appendix 2 -References

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Appendix 3 – Logic chain and benefits matrix

Logic chain /benefit	Outcome	Indicator	Value	Deadweight	Attribution	Yr 1 to Yr 7 value
Benefit to society Physical health	Short term – physical activity and social play Long term – avoidance of chronic illness	Quality of Life years	£465	20%	40%	£390,600
Individual achievements and behaviours Educational attainment	Short term – increased attendance and performance Long term - enhanced qualifications and earnings	Key stage 1 GCSE Average earnings	£4096	20%	40%	£3,440,640
Benefits to society Crime reduction	Short term Reduced incidence of minor crime Long term – Reduced incidence of serious crime	Reported incidents of crime	£553,392	20%	40%	£265,628 x 7 years £1,859,396
Benefits to society Reduction in benefits claimed	Long term – wage earning levels	Level of benefits not claimed	£9.234	20%	40%	£3,723,148
Social and emotional capabilities Mental health	Short term - Confidence and well being Long term - avoidance of treatment	Service costs/lost earnings	£4670	20%	40%	£117,784
			1	1	Total value of benefits	£9,531,568

An analysis of the economic impact of Playwork in Wrexham – May 2016

Quality of Life Years

The QALY is a standardised measure of health gain widely used in health economics. It comprises two dimensions: time and quality of life. The latter is measured on a scale between 0 (death) and 1 (perfect health). For instance, 1 year of perfect health is measured as 1 QALY. The advantage of this scale is twofold: not only does it allow different health effects to be expressed on a single scale; but there are also accepted monetary values for QALYs that allows these effects to be expressed as monetary values.

Optimism bias

The Treasury Green book encourages project appraisers to deploy "optimism bias" in assessing costs and benefits to publicly funded projects. This is an adjustment procedure to redress the systematic optimism that has been recognised as afflicting the appraisal process within the UK. The procedure acknowledges that there is likely to be some difference between what is expected and what happens due to biases unintentionally inherent in the appraisal, and risks and uncertainties that materialise. This, the Treasury Green Book recognises, is due to a demonstrated, systematic, tendency for project appraisers to be overly optimistic.

The procedure enables project teams to consider a number of aspects:

- By how much can we allow benefits to fall short of expectations, if the proposal is to remain worthwhile? How likely is this?
- How much can operating costs increase, if the proposal is to remain worthwhile?
- How likely is this to happen?
- What will be the impact on benefits if operating costs are constrained?
- Applying these questions to the options set out in this assessment we recommend the following % deductions for optimism bias for each of the options

The resulting 'score' is a percentage that should then be applied to the various costings and projected outputs in the project i.e. if a project has an optimism bias of 10% and is projected to cost £10m the cost should be revised to £11m after accounting for the bias. Conversely if the same project was expecting 10,000 visitors a year it should have the projections reduced to 9,000 to account for the bias.

We estimate that the following bias should be factored in to the four options:

- Option 1 10%
- Option 2 10%
- Option 3 25%
- Option 4 30%

As a guide the chart below illustrates the rationale for applying percentages:

Confidence grade	Colour coding	Data source	Data source Age of data		Optimism bias correction
1		Independently audited cost data	Current Data (<1 year old)	+-2%	0%
2		Formal service delivery contract costs	1-2 years old	+-5%	+5%
3		Practitioner monitored costs	2-3 years old	+-10%	+10%
4		Costs developed from ready reckoners	3-4 years old	+-15%	+15%
5			4-5 years old	+-20%	+25%
6		Uncorroborated expert judgement	>5 years old	+-25%	+40%

Source: Supporting public service transformation: cost benefit analysis guidance for local partnerships

The means: to change places for the better.

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