Foundation Phase: Talking Point

Outdoor Risky Play and Schema Development in the Early Years Part Two

Dr. Amanda Thomas and Pavla Boulton, University of South Wales, Newport.

Key words: Risky play; outdoors; affordance theory; loose parts; schemas

In a 2-part series of articles for Early Years Wales' Foundation Phase Talking Point, Dr. Amanda Thomas and Pavla Boulton, from the University of South Wales, Newport explore outdoor risky play and schema development in the Early Years. In this smalltalk issue part two of the article looks at definitions of schema, schema development in the Foundation phase and Curriculum for Wales 2022 and why it is important for early years practitioners, in the non-maintained and the maintained sectors, to recognise and develop schemas.

At the end of the article you will find 'work group supervision' (Louis, 2021) or reflective questions that can be used to support you and your team to apply your 'professional knowledge and experience' (Louis, 2021, p.75) to your reading and observations, maybe as part of reflective journaling and supervision work or as part of your staff meetings.

There are numerous definitions of schemas and what they mean. Many philosophers and theorists have researched 'schemas' and each has a slightly different approach to offer. Piaget suggested that children organise their knowledge and understanding of the world into cognitive structures which he called schemas (1959)

and 1970). Athey (1990) stated that schemas were, 'a pattern of repeatable behaviour into which experiences were assimilated and that are gradually co-ordinated'. Nutbrown defines schemas as a 'pattern of behaviour which has a consistent thread running through it' (2006, p.10).

In this article schemas are seen as "a repeated pattern of behaviour usually seen in young children's play, supporting knowledge and understanding of how the world works" (Thomas, 2019).



What is a schema?

A schema is a repeated action, often seen in the behaviours of young children.

Schemas and learning?

Schemas help us to organise our thoughts and actions. They are often seen when young children are allowed to lead their play.

Schemas are biological.

We are born with them but the offered environment helps to support and develop them.

Why are they important?

Schemas link to developments in the brain. They support children's development and learning.

Fig.1 provides an overview of schemas to help construct a working understanding (Thomas, 2019).

There are many different dynamic action schemas (Athey, 1990). Figure 2 illustrates the most common schemas seen in Early Years settings. Each of these schemas is broken down and explained in the 'Planning for Schemas Toolkit' (Thomas, 2019) and each is supported by suggestions, resources, activities, and vocabulary that Early Years practitioners can utilise, as well as links to the areas of learning in the Foundation Phase and the Curriculum for Wales. These ideas will help to support practice to nurture children's schematic development.





Observing children's schemas provides the practitioner with a window into the child's world, it is an insight into how they think and how they are processing what is going on around them.

It is important for Early Years practitioners to recognise schemas because:

- We can identify where children are at in their development.
- It provides an understanding of what otherwise may be seen as a series of disconnected and random actions by the child.
- It encourages practitioners to observe children closely
- Recognising a child's schematic interests allows you to provide resources and activities that match their schemas, i.e. you afford the child the opportunity to connect with objects and experiences in their own unique way
- It supports children's development through exploration and investigation; pedagogy becomes child focused and child centred.

(Boulton and Thomas, 2021b)

Researchers believe that recognising and nurturing these schemas is important because by using schemas to make sense of the world young children are equipping themselves with the knowledge and skills that are the foundations for almost everything they will do in later life.

Currently there is little contained within curriculum policy documentation in Wales about schemas or their development in early years children:

'By repeating a learning experience, they develop schema or patterns of thoughts that are strengthened until they are able to make connections' (WAG, 2008, p.9).

'Observation may draw attention to particular schema or patterns of thinking that predominate a child's play' (WAG, 2008, p.22).

There is limited guidance available on how to recognise and develop schemas in young children in these policy documents. We need to address this in the Curriculum for Wales 2022, both in non-maintained and maintained settings. Nutbrown (2011) however makes this important observation 'Children's ways of learning do not change because national policies or the prescribed curriculum changes' (p128).

Read our blog extracted from the book Schemas, written by Stella Louis and published by Early Years Wales to find out how why schemas are an important part of a child's development and how parents, carers and practitioners can support a child's schematic interest.

Early Years Wales members can claim their FREE copy of the book via the link below - https://www.earlyyears.wales/en/news/blog-schemas

Sgemâu



Conclusion

In summary of the articles in this two-part series about risky outdoor play and schema development, we can see that being outdoors affords a more heightened use of the senses (Carson 1956) and enables children to use the outdoor environment and materials and loose parts in ways that have meaning and value that are unique to the child perceiving them (Gibson, 1979). Children will choose to engage with loose parts as a significant part of their play if the opportunity is provided, especially when accessed in an outdoor environment. Children will 'tinker' with the objects available to them, taking them into places, spaces, and orientations outdoors that would be difficult to replicate indoors. Practitioners do not need to teach children how to play with loose parts, but just need to step out of the way, enabling children's imaginations to nurture their schemas. Schemas are an essential element of children's development; they are a key cognitive process through which they construct knowledge and actively make meaning of the world around them.

Resources and further professional learning opportunities

You can find ideas and supporting materials in the Schema development Toolkit: Planning for Schemas in the Welsh Curriculum (Thomas, 2019) https://hwb.gov.wales/api/ storage/4be12be2-3180-4619-963d-b62c4f252423/Toolkit%20 supporting%20schemas.pdf which will provide all the guidance needed to plan your provision using schema development as a core focus in your practice.

The full list of references used in both articles can be found: https://www.earlyyears.wales/en/foundation-phase (scroll down)

Join us at the Early Years Wales Foundation Phase Excellence Network events to continue your exploration of outdoor play and schemas. We would like to hear from early years practitioners and settings so that we can develop case studies about schema development. Please contact smalltalk@earlyyears.Wales for more information.



Ideas for 'work group supervision' (Louis, 2021) and reflective questions:

Journal/draw/record your initial reactions to the article and give examples of ideas you felt comfortable with and ideas that you felt uncomfortable with.

Journal/draw/record your thoughts about this article and explore what makes you think this way.

- What images and observations could you use from your practice to illustrate your thoughts?
- What other reading have you explored that could illustrate your thoughts? What 'affordances' or loose parts have the children been exploring and have you recognised any schematic patterns of behaviour?
- What questions do you have about supporting schemas in vour setting?
- How could you enrich schemas in outdoor play in your setting?
- What new ideas did you meet in the article? What ideas will you explore further?

Use 'work group supervision' (Louis, 2021), team meetings or time with a mentor, tutor or colleague to share your reflections, observations and learning.



You may also be interested in:

Outdoor Risky Play and Schema Development in the Early Years Part One, *smalltalk*, (autumn 2021), pg 26 – 30 Cover story: The importance of play, smalltalk, (spring 2021) pg 10 - 22

'The Lost Words Project' at the University of South Wales, Newport, *smalltalk*, (spring 2020), pg 18 – 20

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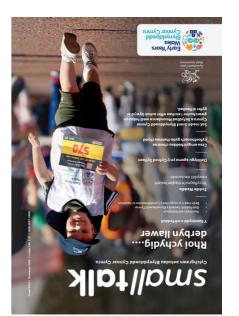
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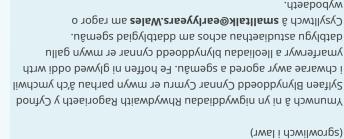
smalltalk 27 https://www.earlyyears.wales/cy/shop ôl rhifynnau o smalltalk am ddim: Gall aelodau Blynyddoedd Cynnar Cymru lawrlwytho onodpna ga dowibiadq A smalltalk, (gwanwyn 2020), tud 18 - 20 'The Lost Words Project' ym Mhrifysgol De Cymru, Casnewydd, 10 - 22 tud

Stori glawr: Pwysigrwydd chwarae, smalltalk, (gwanwyn 2021)

tud 26 - 30

yn y Blynyddoedd Cynnar Rhan Un, smalltalk, (hydref 2021), Chwarae Mentrus yn yr Awyr Agored a Datblygiad Sgemâu

Efallai y byddwch chi hefyd â diddordeb mewn:



(sgrowliwch i lawr) i'w canfod: https://www.earlyyears.wales/cy/cyfnod-sylfaen Mae rhestr lawn o'r cyfeiriadau a ddefnyddiwyd yn y ddwy erthygl

canolbwynt craidd yn eich ymarfer. i gynllunio'ch darpariaeth gan ddefnyddio datblygu sgemâu fel schemas.pdf?preview=true gyda'r holl arweiniad angenrheidiol 3180-4619-963d-b62c4f252423/Toolkit%20supporting%20 (Thomas, 2019) https://hwb.gov.wales/api/storage/4be12be2-Sgemâu: Cynllunio ar gyfer Sgemâu yng Nghwricwlwm Cymru Mae syniadau a deunydd cefnogi yn y Pecyn Gwaith datblygu

proffesiynol pellach Adnoddau a chyfleoedd dysgu

wybodaeth.

adeiladu gwybodaeth ac yn gwneud synnwyr o'r byd o'u cwmpas. plant; mae nhw'n broses wybyddol allweddol; trwyddi maen nhw'n i feithrin eu sgemâu. Mae sgemâu yn elfen hanfodol o ddatblygiad rhydd. Dim ond camu allan o'r ffordd, gan alluogi dychymyg y plant angen i ymarferwyr ddysgu plant sut i chwarae gyda rhannau awyr agored a fyddai'n anodd eu hail greu o dan do. Does dim yn mynd â nhw i mewn o leoedd, gofodau a chyfeiriadau yn yr Bydd plant yn 'chwarae' gyda'r gwrthrychau sydd ar gael, o'u chwarae os bydd cyfle, yn enwedig yn yr awyr agored. Bydd plant yn dewis cysylltu â rhannau rhydd fel rhan arwyddocaol a gwerth sy'n unigryw i'r plentyn sy'n eu canfod (Gibson, 1979). agored a defnyddiau a rhannau rhydd mewn ffyrdd sydd ag ystyr (Carson 1956) a bod plant yn gallu defnyddio amgylchedd yr awyr fod ein synhwyrau'n cael eu defnyddio fwy yn yr awyr agored mentrus yn yr awyr agored a datblygiad sgemâu, gallwn weld I grynhoi'r erthyglau yn y gyfres dwy ran hyn ynghylch chwarae

Dailgza



syniadau a'r hyn rydych chi wedi'i weld a'i ddysgu. tîm neu amser gyda mentor, tiwtor neu gydweithiwr i drafod eich Defnyddiwch 'arolygiaeth grŵp gwaith' (Louis, 2021), cyfarfodydd

Pa syniadau fyddwch chi'n eu trafod ymhellach?

- Pa syniadau newydd ddaethoch chi ar eu traws yn yr erthygl? agored yn eich lleoliad?
 - Sut allwch gyfoethogi sgemâu yn eich chwarae yn yr awyr eich lleoliad?
- Pa gwestiynau sydd gennych chi ar gyfer cefnogi sgemâu yn batrymau sgematig yn eu hymddygiad? wedi bod yn eu harchwilio ac a ydych chi wedi canfod unrhyw syniadau? Pa 'affordances' neu rannau rhydd mae'r plant
 - Beth arall ydych chi wedi'i ddarllen a allai egluro eich ymarfer i egluro eich sylwadau.
 - Pa ddelweddau a sylwadau allech chi eu defnyddio o'ch

yr erthygl hon a thrafodwch beth sy'n gwneud i chi feddwl hynny. Ysgrifennwch / tynnwch lun / recordiwch eich syniadau ynghylch

a nhw.

teimlo'n gyfforddus â nhw a rhai roeddech chi'n anghyfforddus yr erthygl hon a rhowch enghreifftiau o syniadau roeddech chi'n Ysgrifennwch / tynnwch lun / recordiwch eich sylwadau cyntaf ar

> (Louis, 2021) a syniadau myfyrgar Syniadau ar gyfer 'arolygu gwaith grŵp'

wales/en/news/blog-schemas

AM DDIM o'r llyfr trwy'r ddolen isod https://www.earlyyears. Gall aelodau Blynyddoedd Cynnar Cymru hawlio eu copi

sgematig plentyn.

rhieni, gofalwyr ac ymarferwyr gefnogi buddiant

ddatblygiad plentyn a sut y gall fod sgemåu yn rhan bwysig o Cynnar Cymru, canfod pam gyhoeddi gan Flynyddoedd ysgrifennu gan Stella Louis a'i detholiad o'r llyfr Schemas, wedi'i Darllenwch hefyd ein blog gyda



(Boulton and Thomas, 2021b)

niweddarach mewn bywyd.

yn ganolog.

bydd yr addysgu'n canolbwyntio ar y plentyn gyda'r plentyn Mae'n cefnogi datblygiad plant trwy archwilio ac ymchwilio; gwrthrychau a phrofiadau yn eu ffordd unigryw eu hunain. â'u sgemâu, h.y. rydych yn rhoi cyfle i'r plant i gysylltu gyda yn gallu darparu adnoddau a gweithgareddau sy'n cyd-fynd

sy'n sylfaen ar gyfer bron iawn bopeth y byddent yn ei wneud yn

o'r byd, mae plant ifanc yn gallu cael yr wybodaeth a'r sgiliau

bwysig, oherwydd, trwy ddefnyddio sgemâu i wneud synnwyr

Mae ymchwilwyr o'r farn fod adnabod a meithrin y sgemâu yn

- Trwy ddod i adnabod diddordebau sgematig plentyn byddwch
 - Mae'n annog ymarferwyr i arsylwi'n ofalus ar blant. fel cyfres o weithgareddau digyswllt ac ar hap gan y plentyn.
- Mae'n rhoi dealltwriaeth o beth fyddai fel arall yn cael ei weld
 - Byddwn yn gallu nodi ble mae plant yn eu datblygiad.

sgemâu oherwydd:

Mae'n bwysig bod ymarferwyr Blynyddoedd Cynnar yn adnabod

prosesu beth sy'n mynd ymlaen o'u cwmpas. y plentyn, syniad o sut maen nhw'n meddwl a sut maen nhw'n Mae arsylwi sgemâu plant yn rhoi ffenestr i'r ymarferydd i fyd

neu yn y cwricwlwm' (tud. 128)

ddysgu'n newid oherwydd newidiadau mewn polisïau cenedlaethol fodd bynnag yn gwneud y sylw pwysig hwn 'Nid yw ffyrdd plant o lleoliadau nas cynhelir a rhai a gynhelir. Mae Nutbrown (2011) Dylid talu sylw i hyn yng Nghwricwlwm Cymru 2022, mewn ynghylch sut i adnabod a datblygu sgemåu mewn plant ifanc. Ychydig o arweiniad sydd ar gael yn y dogfennau polisi hyn

sλ,υ oruchaf chwarae plant'.

"Gall arsylwi dynnu sylw at sgema benodol neu batrymau o feddwl

y cysylltiadau' (Llywodraeth Cynulliad Cymru, 2008, tud. 9) patrymau o feddyliau sy'n cael eu cryfhau nes eu bod yn gallu gwneud Wrth ail adrodd profiad dysgu, maen nhw'n datblygu sgema neu

blynyddoedd cynnar:

yng Nghymru am sgemâu neu'u datblygiad mewn plant Ar hyn o bryd, ychydig sydd yn nogfennau polisi'r cwricwlwm





gefnogi ymarfer i feithrin datblygiad sgematig plant.

Cynnar eu defnyddio, yn ogystal â dolenni i feysydd dysgu yn y Cyfnod Sylfaen a Chwricwlwm Cymru. Bydd y syniadau hyn o gymorth i (Thomas, 2019) a phob un yn cael ei gefnogi gan awgrymiadau, adnoddau, gweithgareddau a geirfa y gallai ymarferwyr Blynyddoedd lleoliadau Blynyddoedd Cynnar. Mae pob un o'r sgemâu hyn yn cael eu trafod a'u hegluro yn y 'Pecyn Gwaith Cynllunio ar gyfer Sgemâu' Mae yna lawer o wahanol sgemâu gweithredol deinamig (Athey, 1990). Mae Ffigwr 2 yn dangos y sgemâu mwyaf cyffredin a welir mewn

Mae'r trosolwg yn Ffigwr 1 o sgemâu yn helpu adeiladu dealltwriaeth waith (Thomas, 2019).

a'u datblygu.. əmgylchedd o'n cwmpas yn helpu eu cefnogi Rydyn ni'n cael ein geni gyda nhw ond mae'r

Mae sgemâu yn fiolegol.

mae i'w weld yn aml mewn ymddygiad plant ifanc. Sgema yw gweithred sy'n cael ei hail adrodd ac

Beth yw Sgema?

Pam eu bod yn bwysig?

ymennydd. Maen nhw'n cefnogi datblygiad a dysgu plant. Mae sgemâu'n gysylltiedig â datblygiadau yn yr

ifanc yn cael rhyddid i arwain eu chwarae. gweithrediadau. Fe'u gwelwn yn aml pan mae plant Mae sgemâu yn ein helpu i drefnu'n meddyliau a'n

Sgemâu a dysgu?

Y Cyfnod Sylfaen: Pwnc Trafod Chwarae Mentrus yn yr Awyr Agored a Datblygiad Sgema yn

Dr. Amanda Thomas a Pavla Boulton, Prifysgol De Cymru, Casnewydd. Geiriau allweddol: Chwarae mentrus, yr awyr agored, damcaniaeth 'affordance', darnau rhydd, sgema

y Blynyddoedd Cynnar Rhan Dau

galw'n sgemâu (1959 a 1970). Datganodd Athey (1990) fod sgemâu yn 'batrwm o ymddygiad ail adroddus ble roedd profiadau'n cael eu cydweddu ac sy'n cydlynu'n raddol'. Mae Nutbrown yn diffinio trwyddo' (2006, tud. 10)

Yn yr erthygl hon gwelir sgemâu fel 'patrwm ail adroddus o ymddygiad sy'n cael ei weld fel arfer mewn chwarae plant ifanc, yn cefnogi gwybodaeth a dealltwriaeth o sut mae'r byd yn gweithio" (Thomas, 2019).

Mewn cyfres ddwy ran o erthyglau ar gyfer Pwnc Trafod Cyfnod Sylfaen Blynyddoedd Cynnar Cymru, mae Dr Amanda Thomas a Pavla Boulton, o Brifysgol De Cymru, Casnewydd, yn trafod chwarae mentrus yn yr awyr agored a datblygiad sgema yn y Blynyddoedd Cynnar. Yn y rhifyn hwn o smalltalk mae rhan 2 o'r erthygl yn trafod diffiniadau o sgema, datblygiad sgema yn y cyfnod Sylfaen a Cymrar. Yn y rhifyn hwn o smalltalk mae rhan 2 o'r erthygl yn Cynnar. Yn y rhifyn hwn o sgema, datblygiad sgema yn y cyfnod Sylfaen a chwricwlwm Cymru 2022 a pham ei bod yn bwysig bod ymarferwyr Chwricwlwm Cymru 2022 a pham ei bod yn bwysig bod ymarferwyr cael eu cynnal, yn cydnabod ac yn datblygu sgemâu.

Ar ddiwedd yr erthygl, fe welwch 'arolygu gwaith grŵp' (Louis 2021) neu gwestiynau myfyrgar y gellir eu defnyddio i'ch cefnogi chi a'ch tîm i ddefnyddio 'gwybodaeth a phrofiad proffesiynol' (Louis, 2021, L.75) wrth ddarllen ac arsylwi, efallai fel rhan o gofnodi gwaith myfyrgar a gwaith arolygu neu fel rhan o'ch cyfarfodydd staff.

Mae yna nifer o ddiffiniadau o sgemâu a beth maen nhw'n ei olygu. Mae llawer o athronwyr a damcaniaethwyr wedi ymchwilio 'sgemâu' ac mae gan bob un rywbeth ychydig yn wahanol i'w gynnig. Awgrymodd Piaget fod plant yn trefnu eu gwybodaeth a'u dealltwriaeth o'r byd mewn strwythurau gwybyddol y mae'n eu

