

ECAD5010C Ymchwilio i'r dysgu: beth, sut a pham ydw i'n addysgu?

ECAD5010 Researching the learning: what, how and why am I teaching?



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Yr Athrofa

Addysg a'r Dyniaethau
Education and Humanities



Sesiwn/Session 7

Yn y sesiwn yma byddwn yn edrych ar: In this session we will look at:

- 'Bod yn ymchwilydd medrus' a 'sgeptigol'
- Enghreifftiau o offer arsylwadau
- Cryfderau a chyfyngiadau arsylwad fel offeryn ymchwil
- Bod yn foesegol wrth ymchwilio
- Being a skilled researcher and being sceptical
- Examples of observation tools
- Strengths and limitations of observation as a research tool
- Being ethical in research led practice

Nodweddion Ymchwil

Research Dispositions

Bod yn ymchwilydd
medrus

Being a skilled researcher

Bod yn sgeptigol

Being sceptical

Bod yn foesechol

Being ethical

Being part of an
inquiring profession

Bod yn rhan o
broffeiswn ymholgar



Using observation tools

SYSTEMATIC OBSERVATION OF CLASSROOM DISCOURSE & QUESTIONING													
SCHOOL:	Teacher Question	Respondent				Teacher's Immediate Reaction							
		Male	Female	Group	Whole	Not Answered	Repeats	Over-answers	Asks more	Other (write in)	Repeats	Asks	Explains
CLASS:													
DATE:													
LESSON:													
TEACHER:													
SUBJECT:													
OBSERVER:													

Try to spend each session about 10 minutes on this observation schedule.

Set a stopwatch to record the student's behaviour for a minute, etc.

S/No	Type of
1	Asking

Observation schedules

Student Classroom Behavior Observation Scale

Set a stopwatch to repeat every 2 minutes for 16 minutes. When the stopwatch goes off, classify the student's behavior in the following categories. Note: 1 is the first 2 minute, 2 is the second 2 minute, etc.

S/No	Type of Question	1	2	3	4	5	6	7	8	Total
1	Asking a question				√					1
2	Watching the teacher		√	√						2
3	Talking to classmate									0
4	Working on practice problem						√		√	2
5	Answering a question by the teacher					√				1
6	Not paying attention							√		1
7	Preparing materials	√								1

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Graddfa Leuven Scale

Beth yw Graddfa Leuven?

Pryd i'w ddefnyddio?

What is a Leuven Scale?

When to use it?

<https://www.bing.com/videos/search?q=leuven+scales+&&view=detail&mid=B0A37FA01B7908CAB633B0A37FA01B7908CAB633&&FORM=VRDGAR>

- <https://www.youtube.com/watch?v=WwUCufOeOdE>



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Sut mae cofnodi? How to record?

- Beth am arsylwi eich cyd-fyfyrwyr!
- Rhowch gynnig ar ddefnyddio Graddfa Leuven i arsylwi.
- Ysgrifennwch nodiadau i gefnogi eich barn.
- Let observe your peers – student-teachers!
- Have a go at using the Leuven Scale to observe.
- Write notes to support your judgment.



Gwerthuso

- A oedd hi'n hawdd arsylwi? Pam?
- Byddwch yn sgeptigol!

Evaluate

- What is easy to observe? Why?
- Remember to be sceptical!



<https://i.pinimg.com/originals/0f/48/e9/0f48e9a995b7f6eba14e767be18f8496.jpg>



<https://encrypted-tbn0.gstatic.com/images?q=tbn%3AAND9GcQJ15Mx40d0E4Vz2PLPGbA8JMjLapuZRY1uxXrBiosbW3xfDpz>

Pethau i'w hystyried wrth arsylwi

Things to consider during observation

- Mae arsylwi yn creu ymateb emosiynol cryf
- Mae dysgu yn anweledig
- Gwneud cysylltiadau nad ydynt yn bodoli
- Tybiwn os gallwch ei wneud y gallwch ei weld
- Dallineb
- Observation produces a strong emotional response
- Learning is invisible
- Making links that don't exist
- We assume that if you can do it you can spot it
- Inattentional blindness

Cryfderau a Chyfyngiadau

Strengths & Limitations

- Beth yw cryfderau defnyddio arsylwi fel offeryn ymchwil?
- Beth yw cyfyngiadau defnyddio arsylwi fel offeryn ymchwilio?
- What are the strengths of using observation as a research tool?
- What are the limitations of using observation as a research tool?



Manteision/Cryfderau Arsylwi

Advantages/Strengths - Observation

- Mae ymchwil arsylwi yn rhoi cyfle i wyllo beth mae pobl yn ei wneud mewn gwirionedd yn hytrach na dibynnu ar adroddiadau o'r hyn y maent yn dweud eu bod yn ei wneud.
- Gall y dull hwn osgoi llawer o'r ffactorau bias a achoswyd, e.e. gan y cyfwelydd mewn cyfweiliad
- Observation research provides the researcher the opportunity to watch what people actually do rather than relying on reports of what they say they do.
- This approach can avoid much of the biasing factors caused by the interviewer and question structure associated with the survey approach.



Anfanteision Arsylwi

Disadvantages of Observation

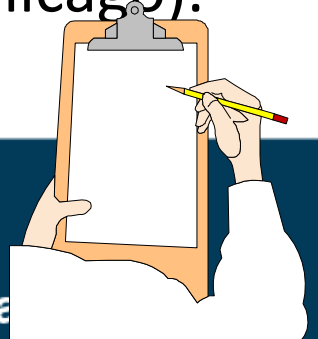
- Dim ond ymddygiad a nodweddion personol ffisegol fel arfer sy'n gallu cael eu harchwilio. Nid yw'r ymchwilydd yn dysgu am gymhellion, agweddau, bwriadau, neu deimladau.
- Gall ymchwil arsylwi gymryd llawer o amser a gall fod yn gostus os bydd yr ymddygiad a arsylwyd yn digwydd yn anaml.
- Gall dehongli data fod yn broblem.
- Goresgyniad (invasion) posibl o breifatrwydd
- Only behaviour and physical personal characteristics can usually be examined. The researcher does not learn about motives, attitudes, intentions, or feelings.
- Observation research can be time consuming and costly if the observed behavior occurs rather infrequently.
- Interpretation of data may be a problem
- Possible invasion of privacy



Cyfyngiadau Arsylwi

Limitations of Observation

- Gall presenoldeb yr arsylwr gael effaith sylweddol ar ymddygiad y rhai sy'n cael eu harsylwi.
- Gall egluro i blentyn beth rydych yn ei wneud effeithio ar eu hymddygiad (effaith Hawthorne (Roethlisberger a Dickson, 1939) – achosodd presenoldeb y sylwebydd mwy o gynhyrchiant yng ngwaith trydanol Hawthorne, Chicago).
- Penblethau moesegol
- The presence of an observer can have a considerable effect on the behaviour of those being observed.
- Explaining to a child what you are doing may affect their behaviour (Hawthorne effect, Roethlisberger and Dickson, 1939 – the mere presence of an observer increased productivity at the Hawthorne electrical works, Chicago).
- Ethical dilemmas



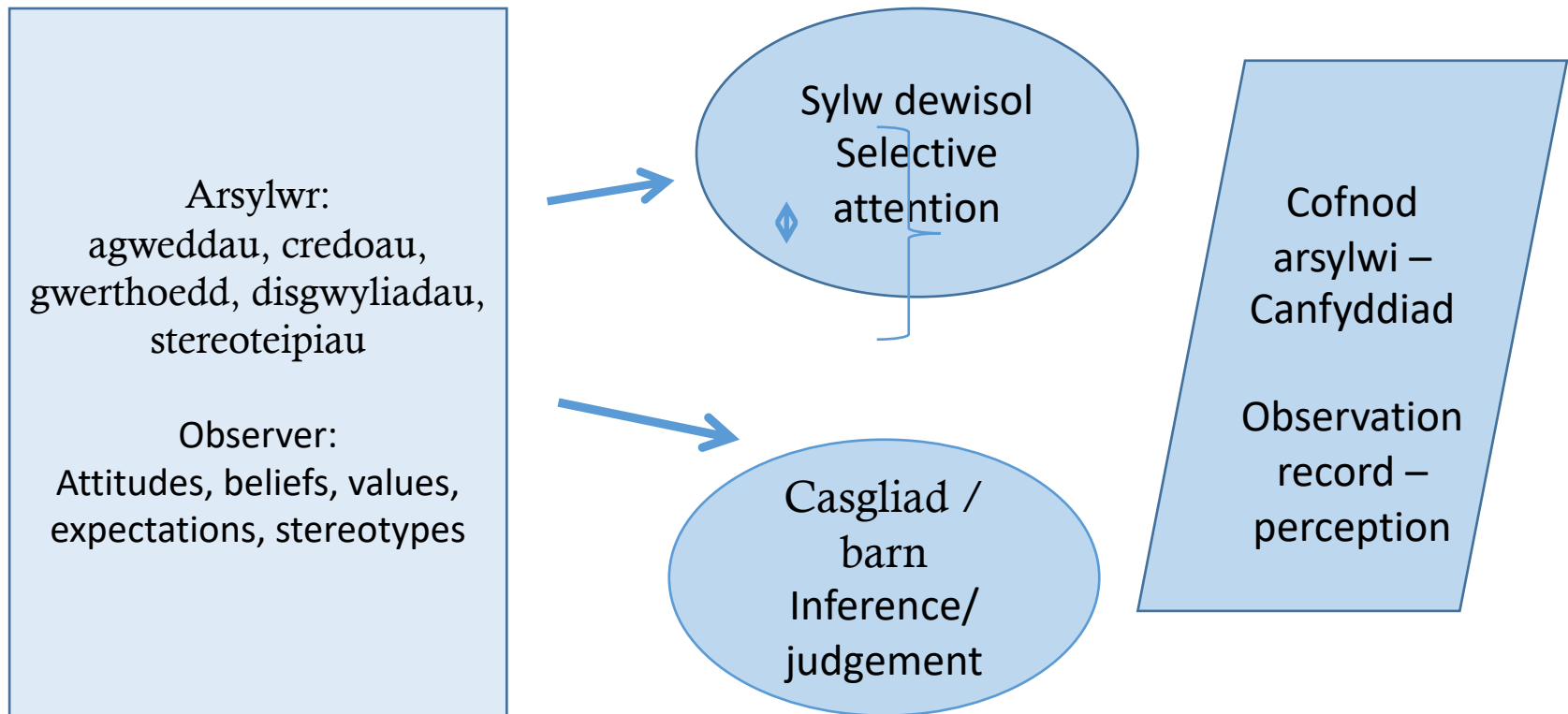
Rhagfarn/Tuedd Arsylwr

Observer bias

- Gall eich agwedd tuag at rywbeth feddwl bod gyda chi rhagfarn/tuedd' ynglŷn â rhywbeth rydych yn ei weld
- Disgwyliadau'r arsylwr
- Emosiynau'r arsylwr
- Certain attitudes may bias what you "see"
- Observer expectations
- Observer emotions



Dehongliad - Interpretation



Materion Moesegol

Ethical considerations

- Goblygiadau ar gyfer pŵer/goruchafiaeth yn y lleisiau sy'n cael eu clywed
- Sicrhau bod llais y dysgwr yn cael ei glywed, ei werthfawrogi ac yn arwyddocaol
- Cydsyniad a chydsyniad
- Anhysbysrwydd, cyfrinachedd, diffyg ymyrraeth, gonestrwydd, parch, ymwybyddiaeth.
- Implications for power/ dominance in the voices being heard
- Ensure that the learner's voice is heard, valued and significant
- Assent and consent
- Anonymity, confidentiality, non-intrusion, honesty, respect, awareness



True or False Quiz



- Observation involves “seeing” and “listening”
- People may behave differently when they know they are being observed so it is better not to tell them
- Structured observations provide more accurate and useful information
- As long as you see it, it does not matter if you record what you saw
- You, as someone who “knows” the participants, are best suited to conduct the observations
- The same principles of sampling apply to observation as to other forms of data collection



Cwis Gwir neu Gau



Atebwch CYWIR neu ANGHYWIR i bob un o'r canlynol:

1. Mae arsylwi yn golygu "gweld" a "gwrando"
2. Gall pobl ymddwyn yn wahanol pan fyddant yn gwybod eu bod yn cael eu harsylwi felly mae'n well peidio â dweud wrthynt;
3. Mae arsylwadau strwythuredig yn rhoi gwybodaeth fwy cywir a defnyddiol;
4. Cyn belled ag y byddwch yn ei weld, does dim ots os ydych yn cofnodi'r hyn a welsoch;
5. Chi, fel rhywun sy'n "adnabod" y cyfranogwyr, yw'r bobl mwyaf addas i nodi'r sylwadau;
6. Mae'r un egwyddorion ynglŷn â samplu mor berthnasol i arsylwi nag ydynt i fathau eraill o gasglu data.

Tasg Gyfeiriedig 3

Directed Task 3

- **Darllen/Read:**
- Danby, S.J., Ewing, L., & Thorpe, K.J. (2011) The novice researcher: interviewing young children. *Qualitative Enquiry*, 17(1), pp.74-84.
- **Copi ar gael ar Moodle.**
- Copy available on Moodle.



Cyfeirnodau - References

- Cohen, L., Manion, L. & Morrison, K. (2018) *Research Methods in Education*. 8th edition. Oxford: Routledge. (pp542-562)
(previous editions are available, e.g. 2011; 6th edition is available online: <https://islmblogblog.files.wordpress.com/2016/05/rme-edu-helpline-blogspot-com.pdf> (Google Cohen, Manion & Morrison 6th edition))
- Fawcett, M. (2009) *Learning Through Child Observation*. London: Jessica Kingsely.
- MacNaughton, G. et al. (2010) *Doing Early Childhood Research*. Maidenhead: Open University Press.
- Mukherji, P. & Albon, D. (2015) *Research Methods in Early Childhood*. London: SAGE.