An Instructional Experiment in Grammar Teaching in Irish Immersion

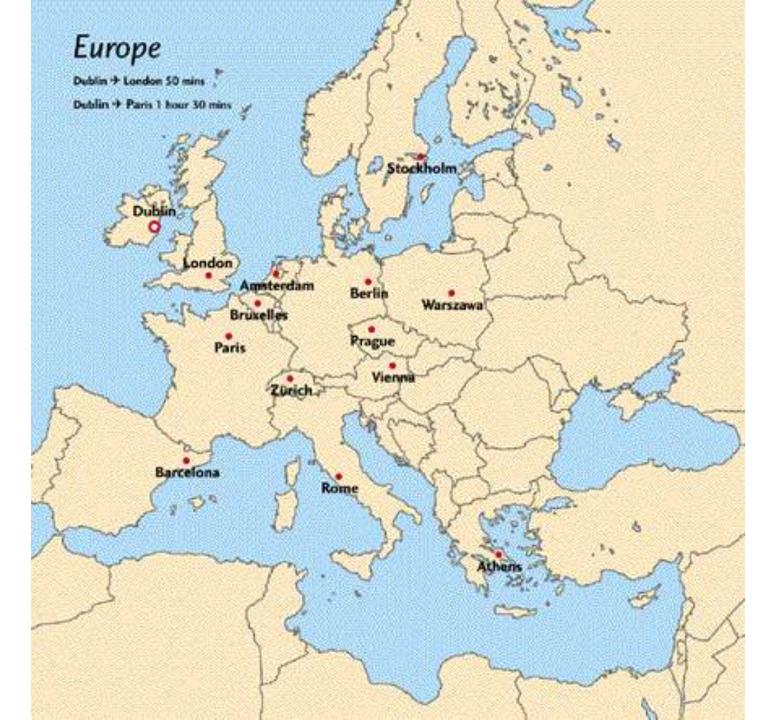
Immersion 2012: Bridging Contexts for a Multilingual World

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Outline of presentation

- Background and purpose
- Research literature
- Design and methodology
- Findings
- Implications



Background to Irish language

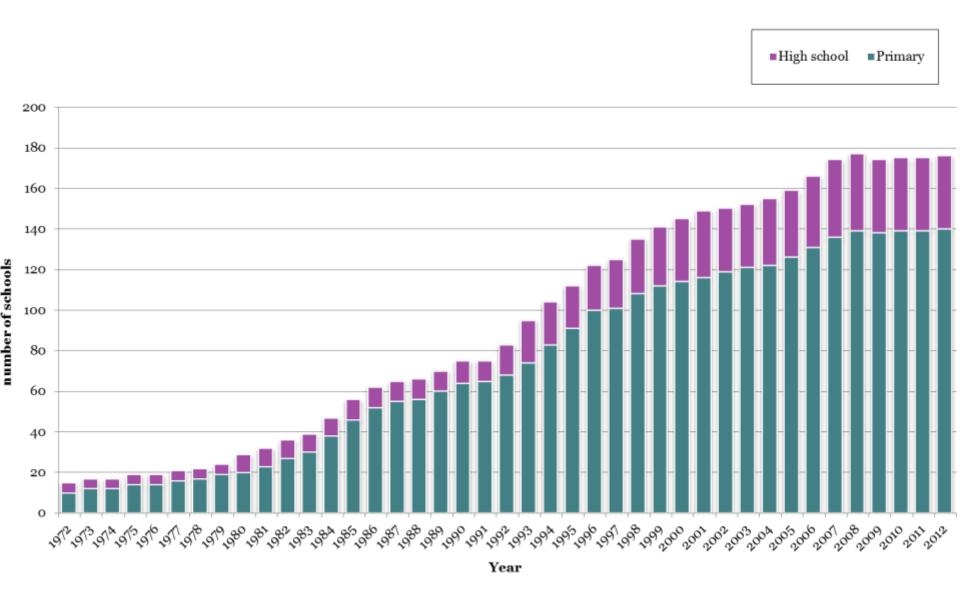
- Irish is an official language (minority) – autochthonous
- Students in all schools study
 Irish from entry to completion

According to 2011 Census:

- 1.77m (41.4%) able to speak Irish
- Only 77,185 (1.8%) daily speakers outside education
- Schools in Gaeltacht & Irish immersion (all-Irish) schools throughout the country
- 7.5% (38,352) primary students educated through Irish



The Growth of Irish-medium Schools in the 26 Counties outside the Gaeltacht 1972-2012



Source: www.gaelscoileanna.ie

Background to study

- early immersion policy in schools
- all schools are immersion centres/stand-alone schools
- Irish is the primary language of the school, English the auxiliary language
- students are expected to speak Irish at all times (except English language arts)
- immersion teachers teach all subjects (11 in total)
- approx. 85% instruction through Irish from age 4-18
- researcher's experience in Irish immersion school and previous research
- 'Gaelscoilis' 'speaking immersion' (Lyster, 1987) Gaeilge líofa lofa (rotten fluent Irish)
- lack of accuracy in students' Irish
- persistence of errors

Research framework

- "Teachers need to be capable of preparing students for a society and an economy in which they will be expected to be self-directed learners, able and motivated to keep learning over a lifetime." (OECD, 2005, p. 97)
- Learner autonomy (Little, 1991). Sociocultural theory 'learner involvement, learner reflection and target language use' (Little, 2007, p. 23).
- "In inductive teaching, learners are first exposed to exemplars of the grammatical structure and are asked to arrive at a metalinguistic generalisation on their own" (Ellis, 2006, p. 97)

Language acquisition research

- once communicative sufficiency has been reached little pressure or motivation to speak with accuracy (Day and Shapson, 1987)
- learners may bypass syntax and rely on schematic and contextual knowledge – rule-based v exemplar-based coding (Skehan, 1998)
- emphasis on understanding and negotiation of meaning rather than form in immersion counterbalanced approach (Lyster, 2007)
- moving learners from semantic to syntactic processing (Kowal & Swain, 1997; Broner & Tedick, 2011)
- "meaning-making" (Swain et al., 2011) processing information? or constructing new knowledge?
- communities of practice (COP) "pays less attention to cognitive processes themselves and more to social practices that facilitate cognitive processes." (Swain et al., 2011, p. 27)

Attainment of Irish immersion students in Irish, English and Maths

- students in Irish immersion schools achieve a high degree of proficiency in Irish relative to their peers in schools where Irish is taught as a subject (Harris, Forde, Archer, Nic Fhearaile & O'Gorman, 2006)
- English reading scores of immersion students are at expected levels when SES factors are accounted for, Maths scores somewhat lower than expected (Shiel et al., 2011)
- very good fluency in the target language but they deviate from native speaker norms in terms of grammatical accuracy (Ó Duibhir, 2009)

Purpose of study

- What effect would of a Form-Focused Instructional (FFI) approach to teaching and learning have on students' accurate use of genitive case in Irish as measured by a fill-in-the blanks type task?
- Design a reliable Irish Grammar Test to measure improvement over time
- Serve as a pilot for a larger study

Nouns in Irish

- Marked for gender with initial mutation after the article an
- Feminine (f) nouns are lenited in nominative case after definite article (*bean*) *an bhean* 'the woman' orthographically marked by the letter 'h' following the lenited consonant
- masculine (m) nouns are not lenited in nominative case (fear) an fear 'the man' but are in genitive case hata an fhir 'the man's hat'
- L2 learners find it difficult to identify gender and frequently disregard lenition (Hickey, 2005)
- In the case of Welsh language, children's development of productive command of grammatical gender and mutations tends to be item-based rather than rule-based (Thomas and Gathercole, 2007)

Genitive case in Irish

- When two nouns come together doras na scoile 'the school door'
- Verbal noun ag léamh an leabhair 'reading the book'
- Compound preposition *i lár an bhóthair* 'in the middle of the road', beside, in front of etc.
- Quantity beagán airgid 'a lot of money', a little, more
- Possession eireaball an mhadra 'the dog's tail'
- Idioms after certain words *timpeall na tíre* 'around the country', according to, across
- Genitive case can change the article, initial and final mutation

Design

- Implement four-week programme
- Develop students language awareness through Form-focused Instruction
- Drumcondra (standardised) Irish Test Reading
- Irish Grammar Test (IGT)
- Pre-test, Post-test (post 1) and Delayed Post-test (post 2)

Design

- Irish Grammar Test (IGT) fill-in-the blanks type tasks
- Three versions of test A,B,C
- 20 items 10 m, 10 f
- Three subscales article, initial and final (3x20=60)
- 4 dummy items embedded which did not require application of genitive
- Students randomly assigned to one each of three forms (group 1 n=10; group 2 n=10, group 3 n=8)
- Students took a different form of the test on each administration – A or B or C
- Didn't become familiar with specific content
- Focus group interviews

Triail A

Cód:	
Scríobh amach na habairtí seo a lea go cruinn gan na lúibíní. Bhí na bileoga i lár (an bord).	
Bhí na bileoga i lár	
Bhí sé ag tabhairt (caint) ar ainmhithe hÉireann.	na
Bhí sé ag tabhairt ainmhithe na hÉireann.	ar
Cé hí an captaen ar (an fhoireann) sin	?
Cé hí an captaen ar	sin?
Dhreap siad go barr (an cnoc). Dhreap siad go barr	
Thit sí i lár (an bóthar). Thit sí i lár	
Bhí fear ag glanadh (an t-ospidéal).	
Bhí fear ag glanadh	_

- Example of first six items on Test A
- Write out the following sentences accurately without the parentheses

Participants

- One intact Grade 6 class
- 28 students 15 girls, 13 boys
- Average age 12.5 yrs
- High level of achievement on TGD-R standardised reading test

Students' achievement on the TGD-R, overall and by gender and TGD-R subscale. (TGD-R = Standardised reading test)

Measure		All	Fem	ales	Males		
	Mean	SD	Mean	SD	Mean	SD	
Vocabulary Standard Score	116.57	11.03	120.87	10.68	111.62	9.54	
Vocabulary Percentile Score	81.18	18.29	87.13	16.75	74.31	18.17	
Comprehension Standard Score	115.64	12.21	118.40	10.20	112.46	13.91	
Comprehension Percentile Score	79.00	21.95	84.53	16.13	72.62	26.42	
Total Standard Score	117.71	11.43	121.67	9.98	113.15	11.65	
Total Percentile Score	82.39	17.73	88.60	11.88	75.23	20.96	

Programme

- Four weeks (Apr-May 2012)
 - average of four 30-minute lessons per week
 - Rinne muid go leor tagairtí don phointe gramadaí i rith an lae mar a tháinig se isteach sa chaint go nádúrtha freisin.
- PowerPoint presentations
- Games memory, cone, word tennis,
- Quizzes
- Dictogloss (rules in context)
- Learner diaries

An Tuiseal Ginideach

Gaeilge mhaith, Gaeilge cheart agus Gaeilge chruinn



Cad a thugann tú faoi deara?? (What do you notice)

An Bord

Ag barr an bhoird



An Bóthar I lár an bhóthair

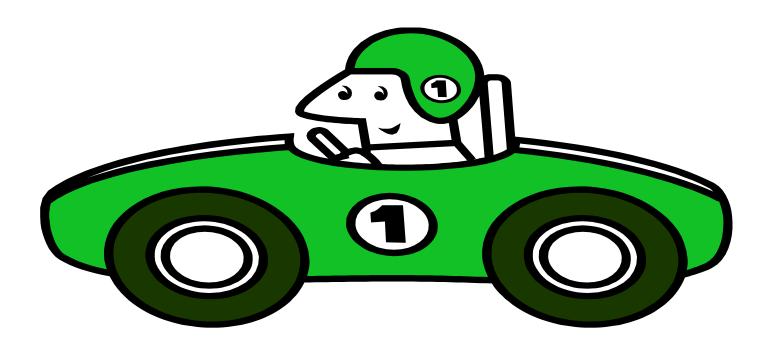


An bád Seol an bháid



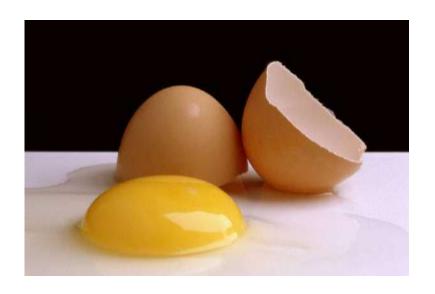
An Carr

Tiománaí an chairr



An Ubh

Ag briseadh na huibhe



An Oíche

Ag deireadh na hoíche



An Obair

Ag déanamh na hoibre



An Geimhreadh

Aimsir an -----



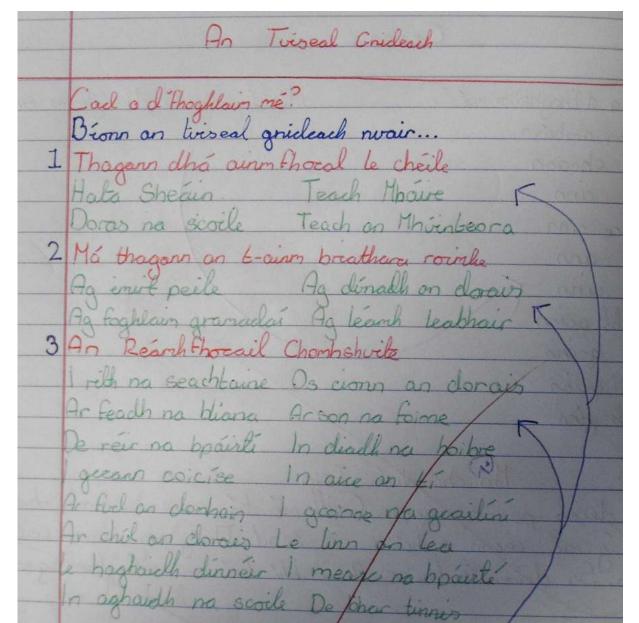
An Dialann Mhachnamhach (Learner diary)

- Cad a d'fhoghlaim mé?
- Míniú ar cad a d'fhoghlaim mé
- Mo shamplaí féin
- Cad a cheap mé?

- What did I learn?
- Explanation of what I learned
- My own examples
- What did I think?



Learner diaries



What did I learn?

Explanation of what I learned

My own examples

What did I think?

Learner diaries

An triscal guideach dara dechlaire Cael o d'Anoghtain osé An othe - deireach na house An abair - ag deanamh na hoibre Minus or carl a difficultain me Sa triscal guidearh dara dechleige authrionen to an gona De cuirean bi h ages i ages e No Samplat Fein An Ungair - caistean na hyngaire An Iodail - brat na blodaile Tá mé tvirseach

What did I learn?

Explanation of what I learned

My own examples

What did I think?

Results

- Students randomly assigned one each of three forms
- Results indicate that the groups are equivalent in terms of their proficiency in Irish as measured by the TGD-R
- At pre-test stage, Form B of test proved somewhat easier but no significant differences at post-test stage

	Mean
Form A	24.4
Form B	27.3
Form C	23.1

Mean scores on the IGT - Pre, Post1 and Post2

	Time								
	Pre	9	POST1 POST2			%	%	%	
Scale	Mean	SD	Mean	SD	Mean	SD	Correct Pre	Correct Post1	Correct Post2
Alt									
Article	12.46	1.40	17.75	1.78	16.96	2.03	62.3	88.8	84.8
Tús									
Initial	9.82	2.14	16.82	1.83	16.70	2.37	49.1	84.1	83.5
Deireadh									
Final	2.79	2.79	15.61	2.01	14.96	3.09	13.9	78.0	74.8
Total	25.07	5.28	50.18	4.99	48.63	7.04	41.8	83.6	81.0

76.4

Mean scores on the IGT by gender of items, at Pre, Post1 and Post2

			Time			0/	0/	0/
Pre		Post1		Post2		Correct	Correct	% Correct
Mean	SD	Mean	SD	Mean	SD	Pie	PUSLI	Post2
9.27	1.56	9.30	0.87	9.36	0.76	92.7	93.0	93.6
6.27	1.64	8.48	1.19	8.60	1.12	62.7	84.8	86.0
1.31	1.62	7.78	1.37	7.76	1.54	13.1	77.8	77.6
16.89	2.96	25.50	2.65	25.70	2.46	56.3	85.0	85.7
3.26	1.83	8.50	1.50	7.73	1.93	32.6	85.0	77.3
3.52	1.48	8.50	1.14	8.23	1.73	35.2	85.0	82.3
1.59	2.06	7.81	1.30	7.23	2.12	15.9	78.1	72.3
	9.27 6.27 1.31 16.89 3.26 3.52	Mean SD 9.27 1.56 6.27 1.64 1.31 1.62 16.89 2.96 3.26 1.83 3.52 1.48	Pre SD Mean 9.27 1.56 9.30 6.27 1.64 8.48 1.31 1.62 7.78 16.89 2.96 25.50 3.26 1.83 8.50 3.52 1.48 8.50	Pre Post1 Mean SD Mean SD 9.27 1.56 9.30 0.87 6.27 1.64 8.48 1.19 1.31 1.62 7.78 1.37 16.89 2.96 25.50 2.65 3.26 1.83 8.50 1.50 3.52 1.48 8.50 1.14	Pre Post1 Post2 Mean SD Mean 9.27 1.56 9.30 0.87 9.36 6.27 1.64 8.48 1.19 8.60 1.31 1.62 7.78 1.37 7.76 16.89 2.96 25.50 2.65 25.70 3.26 1.83 8.50 1.50 7.73 3.52 1.48 8.50 1.14 8.23	Pre Post1 Post2 Mean SD Mean SD 9.27 1.56 9.30 0.87 9.36 0.76 6.27 1.64 8.48 1.19 8.60 1.12 1.31 1.62 7.78 1.37 7.76 1.54 16.89 2.96 25.50 2.65 25.70 2.46 3.26 1.83 8.50 1.50 7.73 1.93 3.52 1.48 8.50 1.14 8.23 1.73	Pre Post1 Post2 % Correct Pre Mean SD Mean SD Mean SD 9.27 1.56 9.30 0.87 9.36 0.76 92.7 6.27 1.64 8.48 1.19 8.60 1.12 62.7 1.31 1.62 7.78 1.37 7.76 1.54 13.1 16.89 2.96 25.50 2.65 25.70 2.46 56.3 3.26 1.83 8.50 1.50 7.73 1.93 32.6 3.52 1.48 8.50 1.14 8.23 1.73 35.2	Pre Post1 Post2 % Correct Pre Correct Post1 Mean SD Mean SD Mean SD 9.27 1.56 9.30 0.87 9.36 0.76 92.7 93.0 6.27 1.64 8.48 1.19 8.60 1.12 62.7 84.8 1.31 1.62 7.78 1.37 7.76 1.54 13.1 77.8 16.89 2.96 25.50 2.65 25.70 2.46 56.3 85.0 3.26 1.83 8.50 1.50 7.73 1.93 32.6 85.0 3.52 1.48 8.50 1.14 8.23 1.73 35.2 85.0

3.24

22.93

Total

8.18

5.11

24.68

5.47

Test means for item aspect and practice/nonpractice classification, overall and by testing occasion

	Total		Pre		Post1		Post2	
Aspect	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Alt Practice	77.00	22.16	57.40	16.68	90.88	11.69	82.94	21.45
Alt Non- Practice	73.29	25.25	60.10	19.50	81.55	25.17	78.40	25.88
Tús Practice	73.06	27.84	41.58	16.47	92.79	10.03	85.25	20.43
Tús Non- Practice	58.98	30.45	35.46	26.05	71.77	23.22	70.11	27.56
Deireadh Practice	60.80	39.00	11.86	15.06	89.92	11.29	81.35	22.32
Deireadh Non- Practice	33.06	35.08	10.74	13.12	46.41	37.30	42.38	37.92
Total Practice	71.34	26.30	37.97	9.69	91.20	9.26	85.34	12.93
Total Non- Practice	67.07	20.09	43.77	10.27	79.31	9.88	78.55	13.38

Scale reliabilities (Cronbach's alpha) for the IGT, overall, and by form and gender of items

Form/Items	Alt/Article	Tús/Initial	Deireadh/Final	Total
Α	.746	.853	.942	.931
В	.710	.769	.935	.900
С	.735	.834	.938	.914
Masculine items	.534	.504	.882	.799
Feminine items	.833	.787	.884	.875
All	.706	.802	.933	.907

Weighted mean scores on the IGT - Pre, Post1 and Post2

			Ti						
	Pre		Post1		Post2		%	%	%
Scale	Mean	SD	Mean	SD	Mean	SD	Correct Pre	Correct Post1	Correct Post2
Alt									
Article	7.94	1.44	13.13	1.62	12.36	1.94	52.9	87.6	82.4
Tús									
Initial	11.63	2.73	21.21	2.26	21.08	3.09	46.5	84.8	84.3
Deireadh									
Final	5.92	5.64	31.15	4.12	30.08	6.39	14.8	77.9	75.2
Total	25.50	8.78	65.50	7.27	63.52	10.90	31.9	81.9	79.4

Weights applied to the data in previous table

Scale	Masculine	Feminine		
Alt	0.5	1.0		
Article	0.5			
Tús	1.0	1.5		
Initial	1.0			
Deireadh	2.0	2.0		
Final	2.0	2.0		
Total	3.5	4.5		

Focus groups: inductive approach

- N: Uaireanta, nuair atá tú ag caint faoi foghlaim gramadaí, tá tú ag smaoineamh, tá tú istigh sa rang agus ta na múinteoir ag múineadh duit. Ach leis é seo tá tú ag piocadh amach na patrúin tú féin agus dul amach sa chlós agus ag imirt na gcluichí chun cur na rialacha i bhfeidhm.
- N: Sometimes, when you are thinking about learning grammar, you are in the classroom and the teacher is teaching you. But with this, you are picking out the patterns yourself and going out to the playground and playing games to implement the rules.

Focus groups: autonomy

D: Má oibríonn tú amach é tú féin tá sé agat. Ach má insíonn an múinteoir duit, cloiseann tú é ach déanann tú dearmad air i lá.

A: Agus uaireanta ní bhíonn tú ag éisteacht.

R:Bíonn tú ag tabhairt níos mó aird nuair a bhíonn ort féin é a oibriú amach tú féin in ionad an múinteoir a bheith ag abair leat, ansin b'fhéidir nach mbeidh tú ag éisteacht léi ach nuair a chaithfidh tusa é a fháil amach, caithfidh tú bheith ag trialladh é a fháil amach agus nuair a fhaigheann tú é fanann sé i do cheann N: If you work it out for yourself you have it. But if the teacher tells you, you hear it but you forget it in a day.

A: And sometimes you don't listen.

M: You pay more attention when you have to work it out yourself instead of the teacher saying it to you, then you might not be listening but when you have to work it out, you have to try to work it out and when you get it, it stays in your head

Focus groups: effectiveness

A: Bhí orainn rudaí a fhoghlaim dúinn féin freisin, rudaí a féachaint suas san fhoclóir. N: Tagann feabhas ar do chuid Gaeilge mar bíonn tú ag dul ar an idirlíon ag féachaint suas www.focal.ie do rudaí agus nuair a cheartaíonn an múinteoir do dhréacht agus nuair a fhaigheann tú é ar ais caithfidh tú type é suas ar an ríomhaire agus téann na rialacha agus an Ghaeilge cheart isteach i do chloigeann níos fearr.

A: We had to learn things for ourselves, to look things up in the dictionary

N: Your Irish improves because you are going on the internet and looking up www.focal.ie (online dictionary) for things and when the teacher corrects your draft and when you get it back you have to type it up on the computer and the rules and correct Irish go into your head better.

Focus groups: learner diaries

M: Ag tús na bliana bhí sé saghas leabhar ach anois ta sé anluachmhar. Tá a lán samplaí ann agus go leor rialacha gramadaí A Níl tú just ag scríobh síos,

N: Mura bhfuil tú cinnte faoi rud éigin féachann tú sa dialann seachas ceist a chur.

caithfidh tú do samplaí féin ...

C: Beidh sé go maith don tionscadal sa mheánscoil freisin. Cabhraíonn sé le d'obair bhaile. Má dhéanann tú dearmad air tá gach rud scríofa ann. M: At the start of the year it was kind of a book but now it is very valuable. There are lots of examples in it and grammar rules.

A You are not just writing down, you have to (put in) your own examples.

N: If you are not sure of something you look it up in the diary instead of asking a question.

A: It will be useful for projects in High School as well. It helps with your homework. If you forget something you have everything written in it.

Focus groups: accuracy

C: Tar éis tamall ní bhíonn ort smaoineamh bíonn sé i do chloigeann.

R: Tá a fhios againn na rialacha agus cén chaoi muid féin a cheartú. Ní bhíonn muid díreach ag guessáil. Tá a fhios againn cad a bhfuil mícheart agus ceart.

N: Níl aon leithscéal againn anois mar chuamar tríd na rialacha go léir agus ta siad againn sa dialann.

L: Má thuigeann tusa an riail, nuair a fheiceann tú an focal, tá a fhios agat an bhfeiceann sé ceart nó mícheart. C: After a while you don't have to think, it is in your head

R: Now we know the rules and how to correct ourselves. We are not just guessing. We know what is incorrect and correct.

N: We have no excuse now because we went through all the rules and we have them in the diary.

L: When you understand the rule you are able to look at the word and you know if looks correct or incorrect

Focus groups: group work, COP

É: Ní chaithfidh tú gach rud a dhéanamh tú féin. Tá tú in ann píosa amháin a dhéanamh. Foghlaimíonn tú é níos fearr. Tá sé níos deise É: You don't have to do everything yourself. You can do one piece. You learn it better. It is nicer.

R: Dá ndéarfadh Seán 'cúpla daoine' céard a tharlódh?

T: Cheartódh daoine eile sa rang é.

R: An gcuirfeadh sé isteach ort?

T: No. Just cuireann sé leis na rudaí atá foghlamtha agat

R: If Seán said 'a couple of peoples' what would happen?

T: Someone else in the class would correct him.

R: Would that upset you?

T: No. It just adds to the things that you have learned.

Limitations

- Small sample size
- High percentile score of class on TGD-R
- Absence of free-production task
- Ceiling effect of test
- Time of year
- Dummy items

Findings

- improvement in mean achievement from pre to post-test stage highly statistically significant
- post 1 and post2 scores not statistically different
- Irish Grammar Test proved reliable and valid
- No difference in the mean scores of males and females on the IGT
- Learning had taken place in an enjoyable way
- COP, positive learning environment

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