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Educational Policy Reform Documents: 'Oughtering' the Designated Identities of Mathematics Teachers

Stephen Quirke¹, Prof Paul F. Conway^{1,2}, Dr Niamh O'Meara¹,
Dr Olivia Fitzmaurice³

¹EPI•STEM, National Centre for STEM Education, UL.

²Department of Education and Professional Studies, UL.

³Department of Mathematics and Statistics, UL.

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- Aim:
 - To examine the (re)construction of post-primary mathematics teachers' identities in the NCCA's (2005) document: *Review of Mathematics in Post-Primary Education: A discussion paper*
- Identity definition employed:
 - “we equate identities with stories about persons. No, no mistake here: We did not say that identities were finding their expression in stories—we said they were stories.”

(Sfard and Prusak 2005, p.14)
- Research questions:
 - To what extent, if any, do the policy documents of Project Maths act as a significant narrator of the designated identities of post primary mathematics teachers in Ireland?
 - In what ways might the implementation of Project Maths have instigated change in the actual identities and designated identities of Irish post primary mathematics teachers?

Overview

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LITERATURE REVIEW

- Identity
- Narrative Identity and Discourse
- Policy as Discourse

METHODOLOGY

- Identity Framework
- Document Selection
- Critical Discourse Analysis

FINDINGS

- Emergent Themes
- Actual Identity
- Designated Identity

DISCUSSION

- ‘Oughtering’ Designated Identities
- Strategic Essentialism



Identity

- The term identity is experiencing a renaissance.
(Sfard and Prusak 2005)
- The concept seeks to understand people's psychological experiences and social behaviour.
(Côté 2006)
- “In many ways identity has become the bread and butter of our educational diet.”
(Hoffman 1998, p. 324)
- Identity can be used as an analytic lens for educational research.
(Gee 2001)

Narrative Identity and Discourse

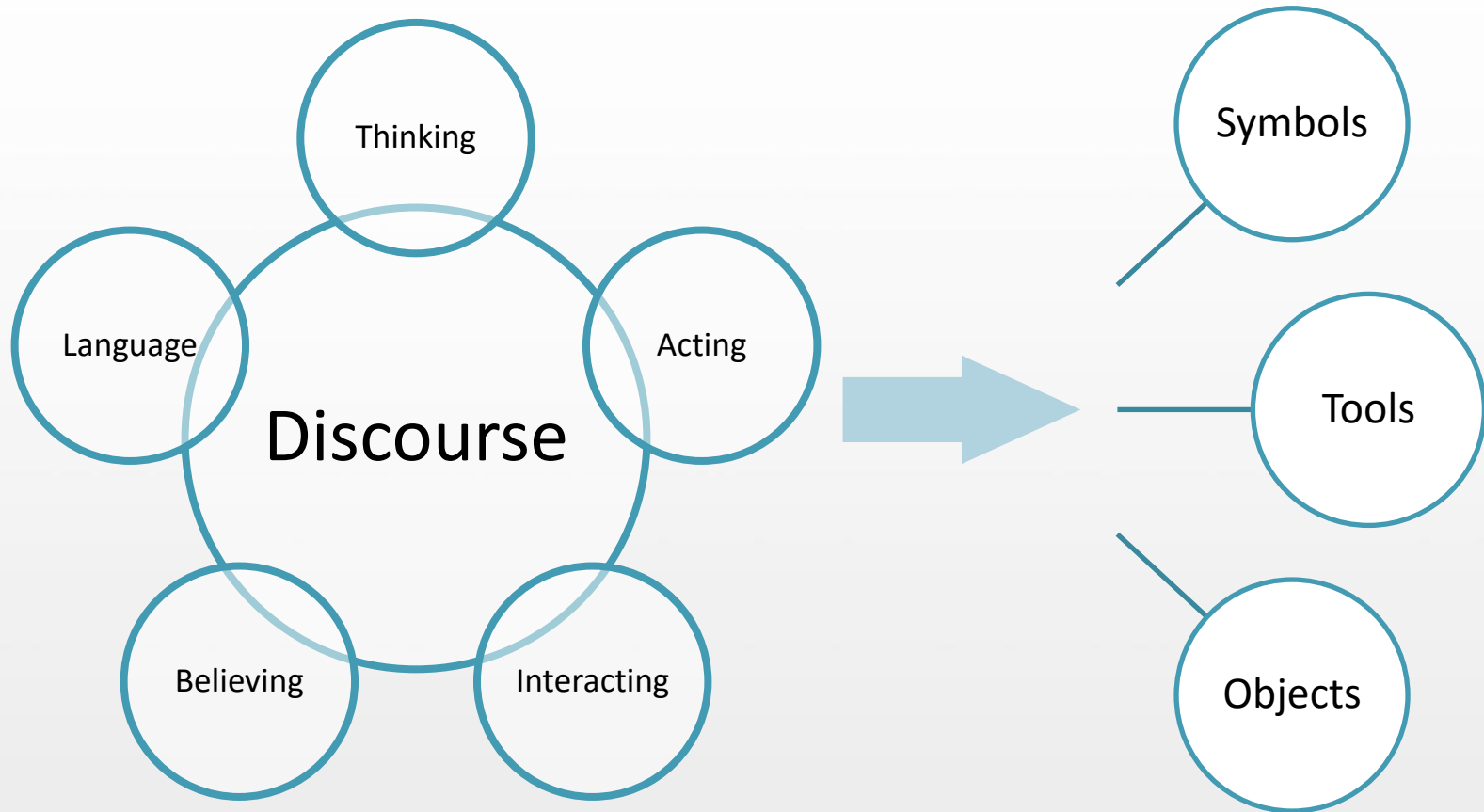
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- Humans constantly tell stories to form their life narrative.
(Connelly and Clandinin 1990)
- The use of narratives is a sound theoretical base for studying identity.
(Beijaard *et al.* 2004)
- Identity is produced by the diffusion of circulating discourses.
 - Significant Narrators
(Sfard and Prusak 2005)
- Identity as narrative ↔ identity as a discursive construct.
(Beauchamp and Thomas 2009)

Discourse

(Gee 2000)

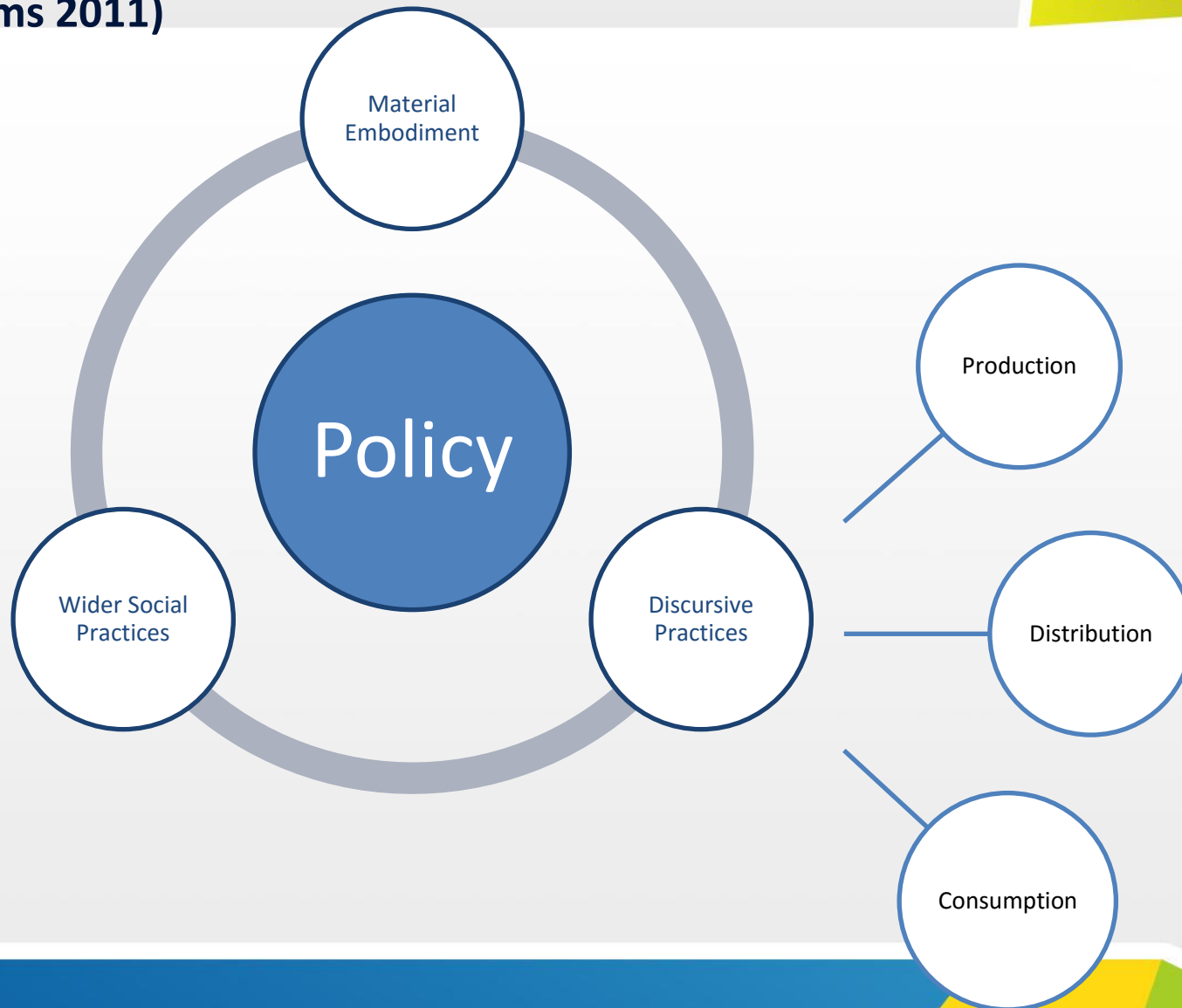
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Policy as Discourse

(Adams 2011)

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'Telling Identities'

- The analysis focuses on human action.

(Penuel and Wertsch 1995)

- Identity:

— stories of action $\longrightarrow$ states and properties of the actors.

(Sfard 2006)

- These stories are:

- reifying,
- significant,
- endorsable.

- The stories are told in triads:

— NCCA Post-primary mathematics teachers and pupils Researcher.

(Sfard and Prusak 2005)

Identity Framework

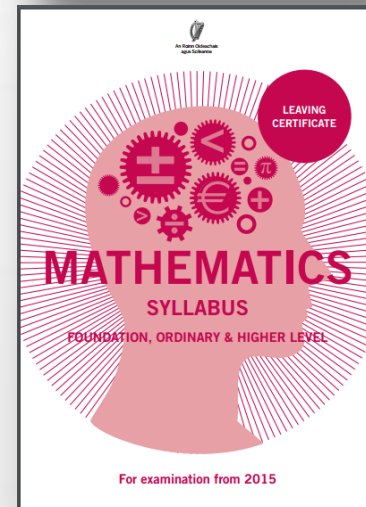
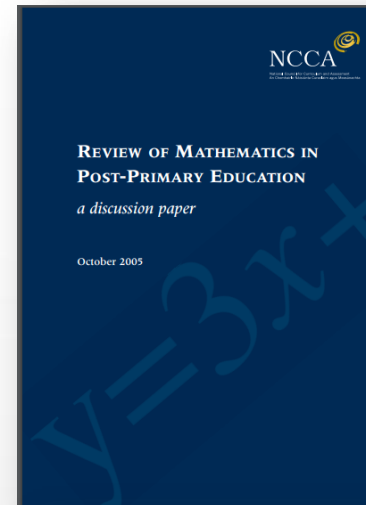
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Actual Identity

- Consists of stories about the current state of affairs.
- Uses present tense verbs.

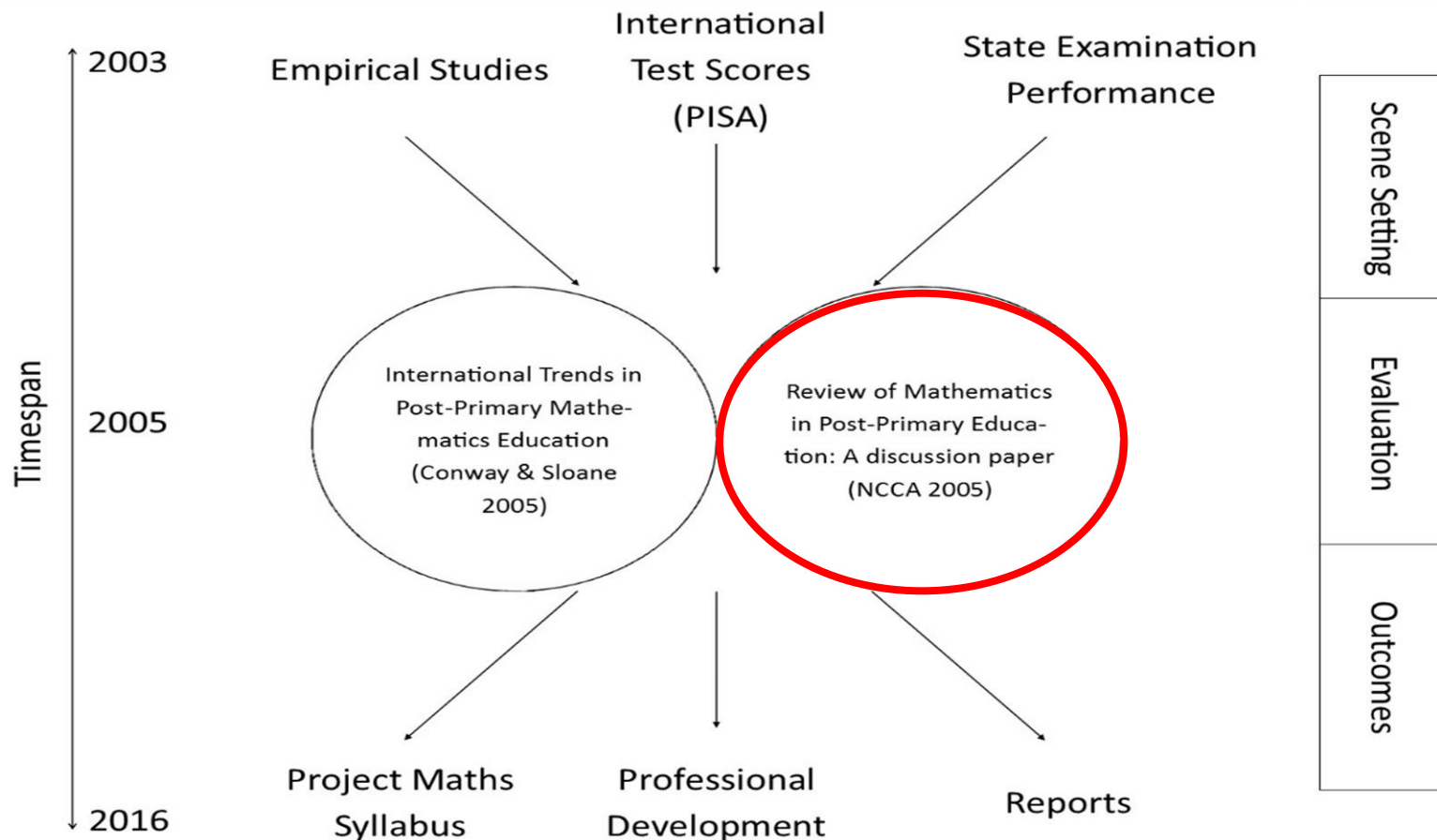
Designated Identity

- Consists of narratives *expected* to be the state of affairs in the future.
- Uses future tense verbs.
- Uses modal verbs and adverbs.



Document Selection: *Review of Mathematics in Post-Primary Education: A discussion paper* (NCCA 2005)

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NCCA Post-Primary Mathematics Education Curriculum Reform Genre Chain

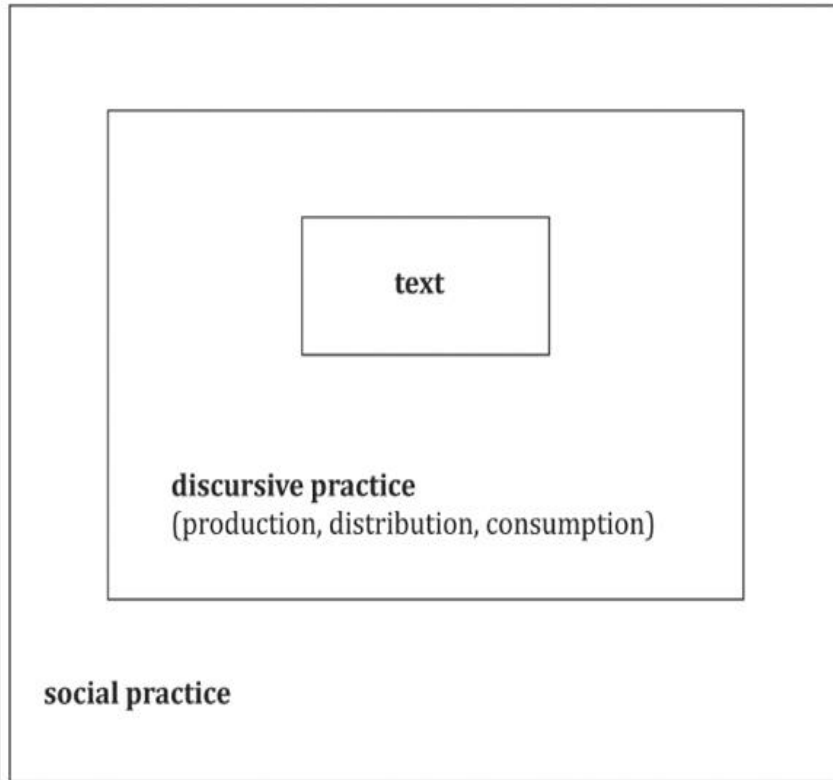


Critical Discourse Analysis (CDA)

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Social Theory of Discourse

(Fairclough 1992, p.73)



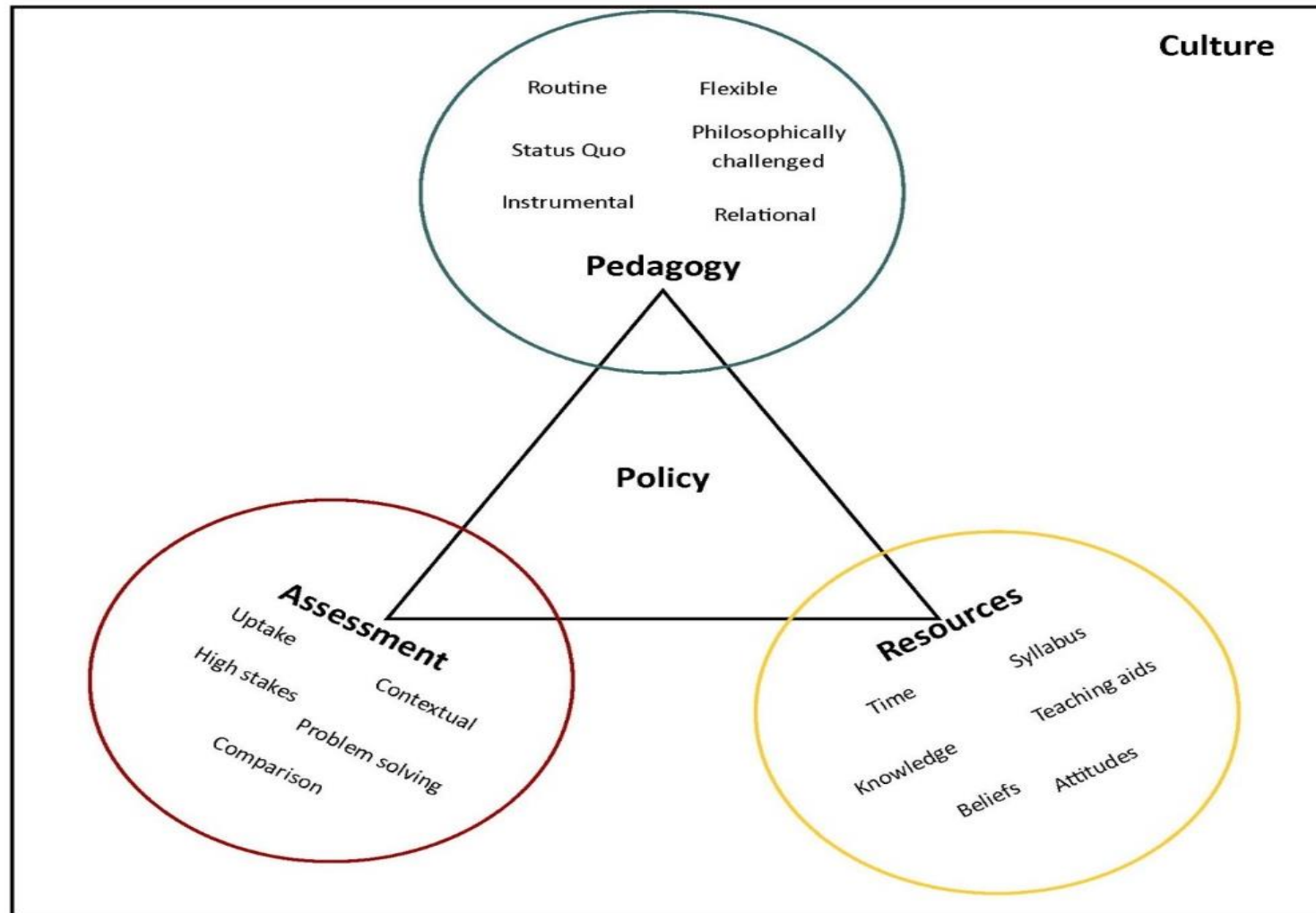
Aspects of Texts Examined

(Taylor 2004)

- Whole text organisation.
- Clause combination.
- Grammatical and semantic features.
- Vocabulary.
- Interpretations were discussed by researchers to gain consensus.

Emergent Themes

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Collective Actual Identity

*The findings of research (Lyons et al., 2003) into the teaching and learning of mathematics in second-level schools in Ireland suggest a high level of **uniformity** in terms of how **mathematics lessons are organised and presented**.*

(NCCA 2005, p.17, emphasis added)

*As evidenced by inspection visits, teaching **is** highly dependent on the class textbook (which **tends to** reinforce the ‘drill and practice’ style).*

(NCCA 2005, p. 21, emphasis added)

*Students who have **suffered** from a ‘tell and drill’ or ‘busywork’ approach (bereft of meaning) may already have learnt this **helplessness** before they enter second level school.*

(NCCA 2005, p.18, emphasis added)

*There **is a need** for teachers to recognise the emotional dimension to learning... The sense of failure (and, possibly, of frustration) that some students feel at an early stage in relation to mathematics **must be** acknowledged and addressed if these students are to engage successfully with later learning in the subject.*

(NCCA 2005, p. 26, emphasis added)

*In common with other teachers, mathematics teachers **will need** to be able to **adapt their teaching** methodology so that [special educational needs] students can develop their mathematical knowledge and skill appropriately... Teachers **will need** to be able to make the connections for ... students [from other countries], and this **requires** some degree of familiarity with **alternative approaches and methodologies**.*

(NCCA 2005, p. 6, emphasis added)

'Oughtering' Designated Identities

- “Oughtering” – Stating what ought to be ...
*A teacher who **believes** that mathematics is a **bag of useful***
- *The actual identity is counterpointed against the
but **unconnected tricks** is likely to emphasise **different**
designated identity.
things than will a teacher who believes that mathematics is*
- *The more central a sub-identity is, the more costly it is to
a body of knowledge as near to **absolute truth** as we can
get, **a web of beautiful relationships**, or an activity
involving the formulation and solution of problems.* (Beijnard et al. 2004)
- There is likely to be unhappiness when there is a
(NECA 2005, p.18, emphasis added)
perceived and consistent gap between actual and
designated identities.

(Ingram 2007)

- Attribution of certain characteristics to everyone in a particular category.
 - (All) teachers.
 - Probabilistic $\longrightarrow$ Stronger claims.
 - Over- generalisation.
- Characteristics are attributed to the category itself.
 - Culture is the explanation.
- The presumption of a unified group.
 - Collectives seen as quasi-persons.
- Policing the collective category.
 - The existence of essential traits.

(Phillips 2010)

Recommendations

- This study serves to develop a framework for analysing educational policy documents in the context of mathematics education reform.
- This framework may be applicable for analysing educational policy documents in other disciplines.

- The discussion narrates the story of post-primary mathematics education in the Republic of Ireland.
- We acknowledge that we - the researchers - are very much part of the story, but have intended to portray repeatable findings.

*A man is always a teller of tales;
He lives surrounded by his stories and
The stories of others; he sees everything
That happens to him through them,
And he tries to live his life as
If he were recounting it.*

John-Paul Satre

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