Dynamic diagnostic language assessment

DD-LANG project outline

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Potential integration of Diagnostic Language Assessment with Dynamic Assessment?
(Ableeva & Huhta, 2012; Anton, 2018; Leontjev, Poehner, & Huhta, in progress)

Vygotsky (1998): "determining the actual level of development [observations of independent functioning] not only does not cover the whole picture of development, but very frequently encompasses only an insignificant part of it"

Diagnostic Language Assessment

- **Diagnostic Assessment (DiagA)**: Alderson (2005) -> distinct from 'achievement' or 'placement' testing; aims to identify learner **strengths & weaknesses**

- Jang & Wagner (2014) -> DiagA characterized: by (1) **constructs** to be measured **clearly defined & specified**, incl. sub-areas of knowledge/ability; (2) procedure should generate **detailed feedback** pertaining to particular dimensions/sub-areas in need of improvement

- L2 DiagA elaborated through research programs since early 2000s, particularly work of Alderson & colleagues at Lancaster U. (e.g., Alderson, Haapakangas, Huhta, Nieminen, & Ullakonoja, 2015; Harding, Alderson, & Brunfaut, 2015; Harding et al., 2018)

DIALANG >> DIALANG 2.0

- **DIALANG** (Alderson, 2005): Includes assessment of five language 'skills': reading, writing, listening, structures (morpho-syntactic knowledge), & lexical knowledge

    Multi-step procedure that included learner self-assessment (linked to CEFR descriptors), assessment, & feedback (advice) to learners re. how they can improve

    https://dialangweb.lancaster.ac.uk/

    http://wp.lancs.ac.uk/ltrg/projects/dialang-2-0/

Item Review

You can now review the responses to the items and see the correct answers. Click on a number below to review the item.

The items are listed by sub-skill.

|	🙂	☹️
Accuracy	1 4 5 6 7 15	8 9 10 11 14 16 18 19 20 21 24 25 28
Textual organisation	13 23	2 3 17 26 27 29 30
Appropriacy		12 22

Item Review

You can now review the responses to the items and see the correct answers. Click on a number below to review the item.

The items are listed by sub-skill.

	🙂	☹️
Inferencing		1 2 16 21 29
Reading for detail	10 27	3 4 5 6 7 8 11 15 18 24 25 26 30
Identifying main idea	14	9 12 13 17 19 20 22 23 28

Self-assessment feedback

In the self-assessment task you gave responses which we would normally expect from a learner at level B2. However, your test result suggests that you are at level A1.

If you have a tendency to over-estimate your own proficiency, this could prevent you from setting meaningful and realistic goals for your language learning.

About self-assessment

L2 DiagA
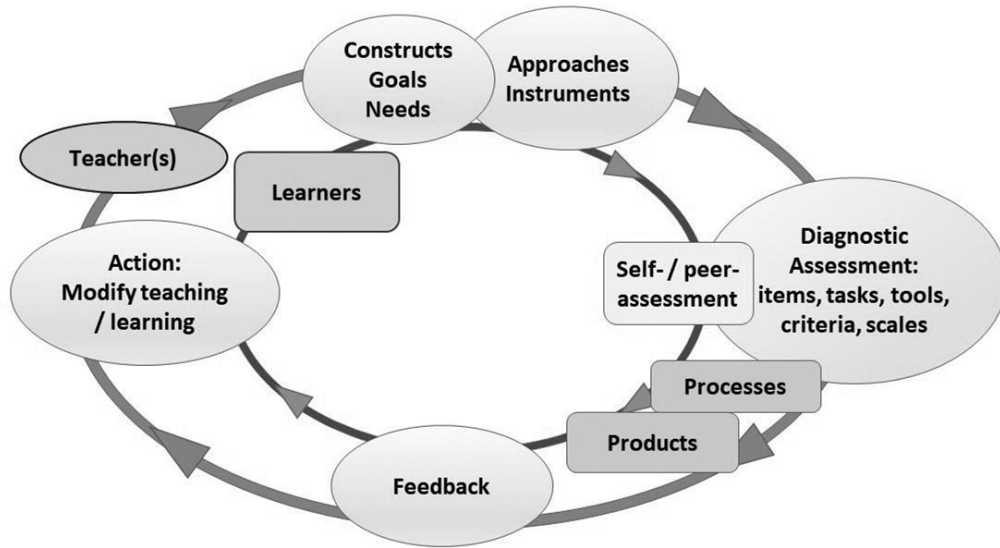
- Concerned with learners' strengths and particularly weaknesses in the assessed L2 constructs
- Emphasizes clearly defined constructs (based on SLA research and/or research on e.g. reading)
- Provides detailed feedback to learners (and teachers) that can be acted upon

Huhta, Harsch, Leontjev, Nieminen (2023, forthcoming)

Zone of Actual Development (ZAD) and Zone of Proximal Development (ZPD)

Photo by Kristiina Halonen

Photo by Alexandr Podvalny from Pexels

Dynamic assessment (DA) is a framework in which teaching and assessment are interrelated parts of **one educational activity** aiming at identifying learners' abilities **in the process of maturing** and **pushing them forward**.

- fully understanding learner abilities requires **active intervention** in development
- teachers and learners **jointly carry out activities**, teachers intervening as difficulties arise
- Sternberg & Grigorenko (2002): provision of **mediation** (prompts, models, feedback, leading questions) as learners encounter difficulty; eliciting verbalizations of learner reasoning; identification of underlying problems

Photo by Kristiina Halonen

Mediating Prompts

mediation should be as **explicit** as necessary to support learner engagement, as **implicit** as possible to allow learner control, **responsive** to learner moves & needs, and **development-focused** rather than strictly task-focused (Poehner, 2018)

- an implicit 'think more carefully' message
- the location of the mistake narrowed down by means of bold highlighting
- a metalinguistic clue
- an example sentence containing the correct structure
- explicit explanation of the language feature and overt correction

(Poehner & Leontjev, 2020)

Resultant Diagnosis of Development

- **how much and what kind of** instruction needed to **bring ZPD into ZAD** (bring potential future into present)?
- focus shifted from **the product of prior learning** to **the processes of abilities now forming**
- teaching and assessment as **dialectically related** parts of the process (Feuerstein et al., 2010)

DiagA & DA: Some Possibilities

- DiagA: constructs & sub-constructs informed by theory of language proficiency (or specific aspects of it such as reading or writing), tied to descriptors & scales

  - high or low ability in specific domains?

  - Mediation & ZPD -> **more than one level on scale simultaneously (ZAD vs. ZPD)?**

- Granularity of abilities, specificity of constructs/ sub-constructs
    - ZPD for language? For reading comprehension? For sub-areas (e.g., deducing voc. meaning from context)? Even smaller (discourse markers)? [**Granularity or Generality of ZPD**]
    - Differing degrees of responsiveness to mediation (**large ZPD or small ZPD**)

- Instructional plans individualized for learners but informed by **ZPD** & **not** ZAD
- Need for continued **cooperation w/ teachers**; understanding of ZPD to **continue to monitor progress, introduce challenges (& mediation) necessary to provoke development**

DD-LANG: Dynamic-diagnostic language assessment – a conceptual and practical innovation in foreign language assessment

GOAL: investigation of an integrated L2 Dynamic-Diagnostic Assessment Framework

THEORETICAL AIM: to extend previous applications of dynamic and diagnostic assessment by integrating them in a complementary manner

EMPIRICAL AIM: to investigate how combining dynamic and diagnostic assessment may **impact** learning and teaching of English in the Finnish upper secondary schools, including how students and teachers prepare for the the final Matriculation Examination (ME)

Design

- **Longitudinal intervention** (pre-post control group design)
- **QUAN:** measures of reading and writing; **QUAN/QUAL**: questionnaires about practices and beliefs; **QUAL**: interviews; classroom observation; training sessions and discussions with teachers (informed by Vygotskian **praxis**)
- Experimental group: **dynamic-diagnostic assessment** and go through the enrichment programme in the **Revita system** (the U. of Helsinki) *and* the classroom
- Teachers in the experimental group will be **trained in the use of diagnostic dynamic assessment**
- Control group: Revita system but without mediation
- Students tested at the **beginning** and **end** of the study (also in the middle); students' and teachers' beliefs and views about learning, teaching, and assessment are studied

We asked Matriculation Examination item writers and raters: what does this item assess?

11.A Text: Rodham

There was a feeling I got before I spoke in front of an audience and sometimes also before an event that was less public but still important, an event that could have consequences in my life – taking the LSATs, for example, which I'd done in a classroom on the campus of Harvard. The feeling was a focused kind of anticipation, it was like a weight inside my chest, but it never exactly came from being nervous. I always had prepared, and I always knew I could do it. Thus the feeling was a sense of my own competence blended with the knowledge that I was about to pull off a feat most people thought, correctly or not, they couldn't. And this knowledge contributed to the final aspect of the feeling, which was loneliness – the loneliness of being good at something.

- **Vocabulary knowledge**   8
- **background knowledge**   4
- **understanding the main idea**   3
- **understanding the meaning of words from the context**   3
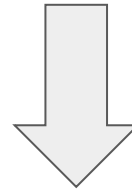
- Discourse markers
- Recognising cues
- Associations
  - Synonyms
- Keywords in surrounding text

(Grabe & Yamashita, 2022)

What significant past experience does the narrator mention?

- Having a public post
- Teaching classes
- Sitting an exam
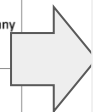
Matriculation Examination: Writing

18.2 Isn't technology wonderful? **99 p.**

We all know about the software that doesn't quite work as advertised and requires a degree in computer science to make it function. We have all grappled with mysterious bugs in our computers and smart phones and been given the advice to switch it off and on again. *TechToday Magazine* wants to hear from its readers. What are your personal experiences with technology going wrong?

Matriculation Examination Writing

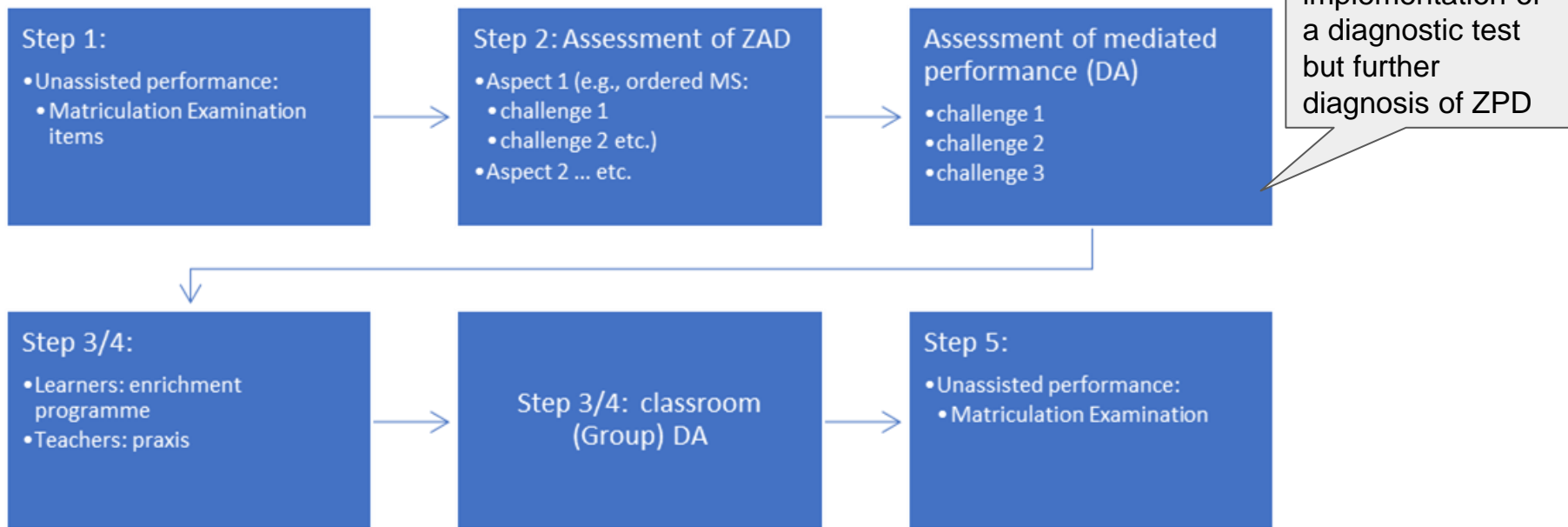| Used points	Communicativeness	Content and organisation	Language breadth and accuracy
99, 97, 95, 92, 90	The author is able to convey the message very clearly, genuinely, smoothly and with nuance. Their text is very easy to read.	The author deals with the subject in an especially diverse, personal, and consistent manner. They skilfully use versatile means of engaging the reader.	The author uses an especially wide, versatile, and idiomatic linguistic inventory that suits the situation well and controls it very well.
88, 85, 82, 80	The author is able to communicate the message clearly, naturally and smoothly. Their text is easy to read.	The author discusses the subject in a versatile and consistent manner. They use diverse means of engaging the reader.	The author uses a wide, versatile, and suitable inventory and controls it well.
78, 75, 72, 70	The author is able to convey the message fairly clearly and relatively naturally. Their text is fairly easy to read.	The author discusses the subject in a conventional way, but mostly in a consistent manner. They use the most common means of engaging the reader.	The author uses a sufficient, conventional, and predictable linguistic inventory of expression (vocabulary and grammar) and manages it relatively well.
68, 65, 62, 60	The author is able to communicate the message in a satisfactory manner. Their text is difficult to read at some points.	The author discusses the topic fairly one-sidedly, but quite consistently. They only use simple means of engaging the reader.	The author uses the narrowest, most common, (possibly) only partially suitable inventory of expression. They often make mistakes.
58, 55, 52, 50	The author is only able to convey the message unclearly. Their text is difficult to read in many places. Certain points may be unclear.	The author discusses the subject one-sidedly and / or repeatedly and partly in an inconsistent manner.	The author uses a limited, limited inventory of expression and makes many mistakes.
48, 45, 42, 40	The author is able to convey the message poorly and, in some places, not at all. Their text is difficult to read. The meaning remains unclear in many places.	The author addresses the topic ineffectively and / or with abundant repetition and inconsistency.	The author uses a very limited, simple inventory of expression and makes especially many mistakes.
35, 30, 25, 20	The author is not able to communicate the message much. Their text is very difficult to read.	The author addresses this topic especially poorly.	The author uses a primitive inventory of expression and mostly erroneously.
15, 10, 5, 0	The author is unable to convey the message.	The author addresses the topic completely inadequately.	The author uses a very basic inventory of expression and almost entirely wrongly.

(The Matriculation Examination Board, 2017, p. 16; our translation)

Communicativeness	Content and organisation	Language breadth and accuracy
- Does your text target the target audience that it needs to (check the task)? - Do you use the language that is appropriate for the task and the audience? (e.g., appropriately formal / informal) - What sections of your text are clear and what paragraphs are still unclear or difficult to read? - At which points does your text hold the reader's interest? Are there points at which it fails to do that? Why? - Have you tried to get your reader interested in your text right from the beginning? How did you do that?	- What is the central idea of this composition? - Which ideas work well and which need more elaboration? - Where do you have enough details or examples and where should they be added? Why? - Where is the organisation clear and where is it confusing? - Do you use connecting devices in a versatile way? - Did you divide your text into paragraphs? Is there just one main idea in each paragraph? - Do you start with each paragraph with a sentence that contains or refers to the main idea of the paragraph? - If it is an argumentative text, do you present it from more than one point of view? - Do you repeat the same thing several times?	- Have you tried to use varied words and phrases? - Have you tried to use other than just basic words? (for example, 'nice', 'good', 'very', 'thing', …) - Have you used your verbs in the correct tense? - Are the verb forms correct? - Have you checked for subject—verb agreement? - Have you used the correct prepositions? - Have you left out the articles where they are required? - Have you used all your pronouns correctly? - Is your choice of adjectives and adverbs appropriate? - Have you written in complete sentences? (narratives may differ in this)

(Leontjev & Pollari, 2022, p. 174)

DD-LANG: *Dynamic Diagnostic* Assessment of L2 Abilities

Diagnosis of Development must be concerned with ZAD *and* ZPD

Not just dynamic implementation of a diagnostic test but further diagnosis of ZPD

Step 1:
- Unassisted performance:
  - Matriculation Examination items

Step 2: Assessment of ZAD
- Aspect 1 (e.g., ordered MS:
  - challenge 1
  - challenge 2 etc.)
- Aspect 2 ... etc.

Assessment of mediated performance (DA)
- challenge 1
- challenge 2
- challenge 3

Step 3/4:
- Learners: enrichment programme
- Teachers: praxis

Step 3/4: classroom (Group) DA

Step 5:
- Unassisted performance:
  - Matriculation Examination

Learner training based on the DD-LANG learner profiles

- Online system [Revita](#)
- Classroom (Group-DA)

    - **Praxis** with teachers
    - Training in the use of DA
    - Based on information teachers receive about their learners

The team

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Kiitos!
Thank you!

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