Dynamic Assessment and Mediated Learning Toward a Coherent Theoretical Framework for Developmental L2 Education

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(L2) Teaching & Assessment: Disparate Worlds?

- Newly invigorated research programs: formative assessment (Leung 2004), classroom assessment (Rea-Dickins 2008), teacher-based assessment (Davison, 2004); diagnostic assessment (Alderson 2006).
- Proposals for use of assessment to support student learning: assessment for learning (Black & Wiliam, 1998), learning-oriented assessment (Turner & Purpura, forthcoming), & interactive assessment (Hamp-Lyons & Tavares, 2011)

(L2) Teaching & Assessment: Disparate Worlds?

- Existent practices in schools: documentation; legitimacy; leveraging for/as assessment
- Conceptualizing/proposing new practices, innovation
 - Basis?
 - 1. Theory or theories of assessment? Of learning? Of teaching?
 - 2. Research findings? (in testing? Classroom assessment? Other?)
 - **3.** (Tacit) assumptions & values (Dewey, Piaget, Vygotsky? Skinner? Krashen?)

Psychological theory of development, thinking, & learning; coherent framework for educational activity (assessment & teaching & curriculum)

Vygotskian Theory & L2 Development

- Early 1980s, Vygotskian Sociocultural Theory (SCT) applied to understanding processes of L2 development (e.g., Frawley & Lantolf, 1985); *mediation, zone of proximal development, internalization* to analyze teaching/learning & L2 development
- Shift in early 2000s toward projects that understand L2 development through intervention (e.g., Negueruela, 2003; Poehner, 2005)
- Aligns w/ Vygotsky's *genetic method* of research (understanding psychological abilities through process of formation)
- Responsive to Vygotsky's dialectical view of theory/ research & practice: theory provides orientation to practice, must also be responsive to practice; practice as testing ground for theory (Lantolf & Poehner, 2014)

Vygotskian (L2) Developmental Education

- Development of SCT as theory of human psychology in tandem w/ practical work in education
- Human abilities arise through intentional introduction of mediation; transforms psychological activity
 - Language for verbal thinking; concepts for making sense of world
- Schooling as special environment for *artificial development*; access knowledge & understanding that is abstract & generalized, not everyday lived experience
 - Schooling distinct from everyday world but must re-orient us for functioning in world

Aim of schooling is leading psychological development, not imparting facts

L2 Developmental Education

- 1. Organizing L2 curriculum around linguistic concepts, not grammar rules
 - Concepts as psychological tools learners use for constructing meaning in L2; gaining control over L2
 - Systemic Theoretical Instruction
- Engagement in L2 activities w/ learners; participation mediated through dialogic interaction
 - Zone of Proximal Development (ZPD) activity -> presence of "mediator" to help learners stretch beyond current capabilities
 - Alignment of mediator contributions to activity w/ learner needs; neither too implicit nor too explicit; optimize learner engagement

ZPD & Teaching-Assessment Dialectic

- Vygotsky -> development as internalization (in-growing)/ appropriation of (external) forms of mediation (e.g., concepts, relations, forms of reasoning)
- Dialogic interaction: psychological activity on intermental plane of development; precedes internalization, activity on intramental plane
- Actual development -> abilities already formed through internalization; ZPD -> abilities in process of forming, not fully developed
- ZPD -> instruction can have greatest impact guiding development; joint engagement in activities beyond learner actual development reveals ZPD (diagnosis, assessment) while also moving development forward (teaching)

Dynamic Assessment (DA)

- Teaching & assessment integrated through mediation & joint engagement (mediator-learner cooperative dialoguing); both essential & inherent features of ZPD activity
- Mediation begins implicit, becomes more explicit depending on learner needs during interaction
- Performance of pedagogical tasks; How much/what forms of mediation required? How responsive is learner?
 → diagnosis of development, highlight learner emerging abilities; guides continued instructional efforts (tailoring mediation & activities to continually be just beyond actual development)

Foregrounds assessment function of ZPD activity

L2 Classroom Teacher's Inventory of Mediating Prompts for DA (Poehner, 2009)

- 1. Pause
- 2. Repeat the whole phrase questioningly
- 3. Repeat just the part of the sentence with the error
- 4. Teacher asks, "What is wrong with that sentence?"
- 5. Teacher points out the incorrect word
- 6. Teacher asks either/or question (negros o negras?)
- 7. Teacher identifies the correct answer

Teacher explains why

Emphasizing Teaching Dimension of ZPD Dialectic

- ZPD activity where systematic tracing forms/levels of mediation not priority; 'diagnosis' functioning to inform next teacher moves but not documented
- Open-ended dialogue, joint activity beyond learner actual development; mediation aligned with learner emerging abilities, but focus of activity arriving at new understanding, modeling, gaining access to new 'tools'
- Foregrounds teaching function of ZPD activity

Mediated Learning

- Reuven Feuerstein (et al., 2003): (strongly influenced L2 classroom-based DA); broad framework includes sessions devoted to DA & sessions for introduction of concepts, materials, modeling, etc.
- Mediated Learning Experience -> contrasts w/ direct learning; intentional insertion of mediator (& other resources) between learner & object of learning
- Mediating moves along implicit-to-explicit range valuable for diagnosing abilities; also entails efforts aimed at guiding learners toward self-regulated functioning, not easily categorized on implicit – explicit scale
 - Feuerstein refers to 'attributes' of ML such as *mediation of meaning; of shared orientation; & of goal-focused behavior,* among others

The Study

- Spring 2013; advanced, university-level learners of L2 English (academic focus, esp. writing); Focus: one participant (Nadia, pseudonym) interaction with Mediator.
- Initial independent writing -> difficulties with English tense & aspect system -> 5 individualized (one-to-one) Dynamic Assessment & Mediated Learning sessions
- Psychological tool introduced, verbally explained; learners independently composed personal narratives about language learning experiences; brought to session for revision/discussion w/ Mediator (experienced ESL teacher)
- **Dynamic Assessment:** diagnosing learner understanding of English tense-aspect system to bring events into discourse
- Mediated Learning: guiding learner efforts to use psychological tool to mediate thinking about tense-aspect choices in writing (understanding of tool & its relevance to activity)

Psychological Tool

- Language Focus: tense-aspect system from a recalled point perspective (i.e., past simple, past continuous, present perfect)
- Consisted of multiple slides; adapted from and informed by: Gánem-Gutiérrez and Harun (2011), Radden and Dirven (2007), and Yáñez Prieto (2008)

Three perspective frames – Simple past (E1), past progressive (E2), and present perfect (E3)



- **1. Event 1:** Yesterday John cuddled the baby (*simple past E1*).
- 2. Event 2: Yesterday John was cuddling the baby when the doorbell rang (*past progressive E2*).
- 3. Event 3: John has cuddled the baby every day this week. (present perfect E3).

Adapted from: Gánem-Gutiérrez and Harun (2011)

Frame Elements of Present Perfect (E3)

Aspect – The speaker/writer's perspective of an event or action

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E3

Boundary: green vertical line indicates beginning of action

Timelines

Solid blue line: portion of the action that has already transpired (beginning point of action to the present time)

Dotted red line: portion of the action that has yet to occur and that continues beyond the present time to an indefinite end point

Dynamic Assessment

Line 1: most implicit; invitation to revisit writing (1st sentence)

Line 5: implicit; non-corrective; invokes tool & concept ("timeframe")

Lines 12 & 13: reference to specific feature of concept/tool ("boundaries")

Lines 24-26: tying language use to creation of time frame & boundaries (focused reading according to concept/tool)

Lines 36-37: prompts learner evaluation of intended time frame and language used in composition

- Is she able to detect problems in writing?

Lines 46-47: turns task back over to learner; re-orients learner to revision of sentence

- Is she able to make appropriate corrections?

DA: Diagnosis according to learner responsiveness

- Focus of mediator-learner activity: evaluation & (re-)mediation of learner (written) performance
- At what point is learner able to identify problems and take steps to correct them?
- What understanding of tense-aspect underlies learner performance (specific choices bringing events into discourse)?

**Able to identify (correct) problems at very outset? Able to correct problems at conclusion of interaction? Able to articulate reasons for changes?

**Mediator moves prompt ways of thinking (teaching is feature of activity)

Mediated Learning

Lines 11-21: **Mediation of meaning; Mediation of goal-setting** (thinking-with-tool, invoking specific elements in interpretation of sentence vs. impulsivity)

Lines 11 & 27: **Mediation of sharing behavior** (note also use of 1st person plural throughout)

Line 49: Mediation of sharing behavior; Mediation of feelings of competence (ceding floor, validating contributions & also learner as co-participant)

Lines 72-73; 75; 77-79: **Mediation of meaning** (generalizing/ abstracting beyond here-and-now of exemplar sentence; broader meaning & relevance experience & of tool)

Lines 71, 72, 77, 81: **Mediation of feelings of competence** ("great", "as you said" to validate participation & interpret success)

Mediated Learning: Progressing toward self-regulation

Learner verbalizations during joint activity reveal understanding (diagnosis is feature of activity)

Focus of mediator-learner interaction is <u>not</u> learners' own use of L2 (<u>not</u> elicited learner performance); not errors to be identified or problems to be addressed; rather, use of concept/tool for regulating functioning in L2 (appropriate basis for activity)

Co-constructing (w/ learner) model for how materials may function as mediating tool for understanding English tenseaspect; interpreting instances of language use and making decisions for language production

Present case is joint functioning, goal of ultimately increasingly independent functioning (process of internalization); requires implicit to explicit progression of language performance but also mediation of other features of self-regulated functioning

Conclusions

- Dialectical logic interrelation of two things; not A or B but understanding unity of A with B; still possible to foreground A or B (Novak, 1968)
- DA & ML together offer powerful framework for education concerned w/ promoting learner development
- More questions to pursue regarding ML: attributes identified by Feuerstein manifest in L2 contexts? Other attributes?
- DA & ML can be used w/ approach to curriculum also rooted in Vygotskian theory (systemic theoretical instruction), coherent *developmental education*

More work w/ L2 teachers