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# Learner's utterance as a foundation of *personal-experience*-oriented classroom diagnostics

#### Streszczenie

WYPOWIEDŹ UCZNIA JAKO PODSTAWA DIAGNOSTYKI NIEFORMALNEJ UKIERUNKOWANEJ NA DOŚWIADCZENIE OSOBISTE

Artykuł jest próbą odpowiedzi na pytanie, w jaki sposób (ustne i pisemne) wypowiedzi uczniów mogą być wykorzystane do rozpoznania tego, jak uczniowie rozumieją treści przedmiotowe i jak osobiście doświadczają edukacji. Tekst wychodzi od przedstawienia uczenia się oraz egzaminu - tj. dwóch składników konstytutywnych diagnostyki edukacyjnej - jako dwóch uzupełniających się składników osobistego doświadczenia edukacyjnego, silnie uzależnionego do zawartego w nich (rozumianego i wykorzystywanego przez ucznia) języka. W celu wyjaśnienia znaczenia kwestii językowych w tworzeniu solidnej diagnostyki szkolnej, tekst omawia zbiór "prawd" leżących u podstaw analizy wypowiedzi uczniowskich i tym samym determinujących komunikację między nauczycielem i uczniem. Następnie przedstawione są argumenty przemawiające za tym, iż przyszłość diagnostyki edukacyjnej zależy w znaczącym stopniu od tego, jak pomyślnie uda się wypełnić lukę między diagnostyką a lingwistyką. Pokazane jest to za pomocą pytań, które "stoją" na skrzyżowaniu tychże dwóch dyscyplin i które wymagają znalezienia odpowiedzi. Tekst zamykają: (a) wnioski wyciągnięte z przykładowych wypowiedzi uczniów na temat egzaminów i procesu uczenia się oraz (b) wskazania dotyczące pozyskiwania danych z tego, co autor nazywa tu językowymi zdarzeniami edukacyjnymi (stanowiącymi jednostkę analizy komunikacji szkolnej).

**Słowa kluczowe**: wypowiedź ucznia, diagnostyka edukacyjna, językowe zdarzenie edukacyjne, osobiste zdarzenie edukacyjne.

#### 1.1. HUMAN STRATUM: Personal Educational Experience

It is the personal experiencing of education that justifies the very existence of the discipline of educational diagnostics. Meant to describe and explain the learner's situation<sup>1</sup>, this consistently developing discipline has essentially been focused on two types of his or her experience: learning and examinations. Whilst the former has long been – as far as the personal dimension of education goes - associated with and perceived through such issues relating to the learner as learning styles, motivation to learn, intelligence, or the context of learning, the interest in the latter has directed educators' attention to such learner-related concepts as test wiseness, anxiety, patterns of achievements, or - consistently analysed - self-assessment.

What, most strikingly, proves to be missing, though, when one studies the scope of issues addressed over the last twenty years in Poland, is the discipline's emphasis on language. Both the constitutive components of the personal educational experience mentioned above rest strongly on (the learner's mastery, i.e. understanding and application of) language. To put it in the simplest way possible, if the language of learning or examinations is familiar to learners, the personal experiencing of them has every chance of becoming beneficial and learner-friendly, whereas if the language departs from the learner's experiencing of reality, the two types of experience are bound to prove detrimental to the learner's development. Hence, if the language itself constitutes such a significant common denominator of learning and examinations, it does merit a more prominent position in educational diagnostics, which this paper is yet one more attempt to signalize<sup>2</sup>.

Beyond every utterance produced by the learner there lies not only knowledge and the ability to say things, but also (largely personal) beliefs and convictions that a learner happens to hold. First, s/he may find it not worthwhile articulating educational content, or, second, s/he may view the learning of a particular school subject as not boiling down to speech (the example of which

<sup>&</sup>lt;sup>1</sup> The scope of discipline has been defined on the website of the Polish Association of Educational Diagnostics: http://www.ptde.org/old/html/potrzeba PTDE.html (with cognitive and emotional aspects lying at its basis); due to the fact that its scope encompasses various learning contexts, this paper consistently refers to 'learners' (rather than 'pupils' or 'students'). The website opened on 2 April 2015.

<sup>&</sup>lt;sup>2</sup> This text can be seen as both a digest and a complementation of its author's conference papers, addressing analyses of language used by school students and teachers: Daszkiewicz (2007, 2008). With this path of educational diagnostics being represented by few other texts, the said papers are referred to a number of times.

was presented in one of the author's earlier publications, with a learner viewing civics as a discipline requiring him to memorise concepts and terms related to the functioning of a civic society, which, needs no articulation to be performed (Daszkiewicz 2008: 329)). Such views on whether it is worth or necessary to utter subject matter does not need to be realized to play an important function, and so, quite undeniably, they constitute an underlying component of anything that learners learn. Needless to say, the differences between learners and between their approach to subject matter also pertain to how scientific or colloquial language they use, which implies that e.g. educational measurement tools (intended to be objective) will frequently fail to catch learners' (subjective) verbalization of issues. Although the causes of differences between learners' language lie beyond the scope of this text, it is worth noting here that, to refer to Bruner's rationale, their language is in each case differently 'scaffolded' by parent-child interactions.

What follows from the above is that due to the use of language some moments in the course of learning acquire a special status, meaning those when the learner happens to articulate (and/or write) specific subject matter, either because s/he chooses to do so or is somehow prompted by circumstances or other participants of the learning environment to speak. These moments have been coined by the author as 'language educational events' and they will be presented below as a unit of analysis that may help educational diagnostics advance on the stratum of its linguistic aspects. A better recognition of these moments (events) brings us closer to diagnosing the (degree of the) learner's creativity, which is a direct consequence of, as Krzysztof Mudyń puts it, the language being a social entity internalized by an individual in the course of ontological development, which sets constraints to the individual's efforts at creativity not only from the outside but also from the inside (Cf. Mudyń 1997: 79). To refer here to Vygotsky's rationale of the social character of language, we can also observe that the language used in an educational event may or may not fall within the learner's zone of proximal understanding rendering the event less or more personal (and, nota bene, social at the same time).

#### 1.2. HUMAN STRATUM: Teacher-Learner Communication

Language educational events, as defined above, are crucial to teacher-learner communication: what the learner's skills are determines the teacher's reception

of the learner's mastery and understanding of the subject matter – regardless of how valid that reception might happen to be. This aligns with J.F. Fourny's statement noting that "speech is the only window through which the physiologist can view the cerebral life": without this "window" the teacher's attempts to "see through" the learner will be to no avail. This being the case, the key aspiration of educational diagnostics consisting in recognizing the learner's position (with regard to the subject matter learnt) can only be fulfilled with an ample collection of his or her (spoken or written) utterances. Only with a sufficient load of the learner's speech are we able to observe, for instance, whether the learner herself/himself is capable to applying (and thus understanding) what Piaget coined figurative thought (conveyed through figurative language).

With the learner's utterances never fully reflecting what is in his or her mind, though, there is a need to construe learner talk through the distinction between the latent and the observable. These two categories have long been used in methodology (e.g. in item response theory, otherwise called probabilistic theory) to designate hidden mental constructs, on the one hand, and their observable consequences, on the other<sup>3</sup>. If we apply this distinction to the learner's (latent) knowledge and his/her (audible/visible) speech, we may note - among others – the following consequences:

- learners with the same knowledge may articulate it differently, meaning in an either less or more communicative manner,
- (b) learners with different knowledge may articulate the same sentences, which implies the need for recognition of how linguistically skilled all learners are<sup>4</sup>.

It is rather obvious that the teachers' comments formulated with reference to learners need to take this distinction into account as otherwise their comments prove but over-simplistic. Let's consider then how justifiable a selection of teacher commentaries will prove to be if we apply the latent-observable lenses.

Commentary 1. When I'm reading Anne's assignments, I can see she thinks properly. She describes geographical phenomena in a way typical of her: full of technical expressions, but at the same time such that her individual or even emotional approach to the issue is demonstrated. It's good because it shows that Anne is learning lots of new things. Sometimes you can have an impression that the description formulated by Anne has been constructed by a person that deals with geography on a daily basis.

<sup>&</sup>lt;sup>3</sup> For example, in: Konarski (2004).

<sup>&</sup>lt;sup>4</sup> This approach can be seen as one of key communication strategies in the classroom, as presented in Twardowski (2005: 26).

Commentary 2. What Luke writes and says draws one's attention to his eloquence and high level of intelligence. What is particularly striking is that Luke presents historical knowledge in his own way. Doing so, he uses very few terms and names which occurred during lessons, but his involved form of expression points to correct understanding of the sequence of events. In Luke's assignments it's always possible to find an interesting presentation of historical issues and I never get bored when reading his works.

Commentary 3. Ola has big gaps in maths. If she is to explain how she's solved a task, she gets lost. Even when the teacher praises her because the result is fine, and asks her to explain it to other learners, she cannot do that. She thinks and mutters something to herself, but it doesn't look like a clear mathematical explanation. What helps her is participation of other learners in the talk, or situations when she's helping on a task in a team, but then one has the impression that she uses her friends' ideas, not her own. And it is the way of solving the problem that matters. She knows the result, but she always says that she's short of time. She's up to something, but it's not quite clear what the target is.

Commentary 4. Sławek's statements don't belong to the desirable ones and they don't merit a high grade. The chaos in which they are formulated signalizes chaos in the information he has acquired. Civics is a subject in which one needs to be able to express oneself properly and to present one's views, and this is exactly what is missing in what Sławek writes or speaks. A conclusion that one draws when reading or listening to Sławek is that he learns hardly anything about civics and he only relies on his memory. It's rather thoughtless of him.

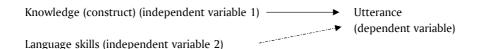
What is clear in all these four situations is that the teacher's idea of the learner's knowledge (which we may view as the *what* of subject matter expressed by learners) is strongly shaped by his or her individual behaviours, personal reasoning and unique position with regard to the use of language (which, on the other hand, we may see as the *how* of that subject matter expressed). Needless to say, whilst the thematic content of utterances will vary across school subjects, the learner's language practices and habits seem to be more fixed and not easily fall subject to modifications, which follows from the simple fact that all learners (or people, in general) have become accustomed to certain structure and lexis prior to any form of school learning.

It may thus be argued that if all the situations referred to by the teachers above were treated by them as language educational events, that is seen as moments when their learners demonstrate individual language-based behaviours (rather than directly unravel their personal knowledge), these situations would be much easier to interpret by teachers, that is make it easier for them to distinguish between the what and the how of what they say and/or write, and thus be better informed about the learner's competence in any particular subject or issue studied.

### 2.1. THEORETICAL STRATUM: Bridging the gap between linguistics and diagnostics

With the learner's language skills determining the teacher's perception of the learner's knowledge on practically every school subject, the theory of what we have coined here language educational events calls for rapid advancement so that the gap between diagnostics and linguistics would be effectively bridged. By emphasizing the special status of these events we address the following three issues at a time: we (1) acknowledge the fact that not all teachers, to say the least, are "linguistically reflective" enough to notice that they fall subject to language-caused false impressions; (2) give prominence to those moments in which there appears to be more contact with the learner's mind, who, quite undeniably, is also learning at the point when s/he is being quiet and the thoughts remain unuttered, and (3) foster validity of educational diagnostics in that reflection is undertaken on what the utterances made, collected and jointly analysed signify.

The case of the teacher assuming that a given utterance unambiguously reflects the learner's knowledge (as if the two could ever be equated) can be regarded as a common instance of the attribution error (understood as "a tendency to overestimate internal factors, attributable to a disposition, and to underestimate the role of external factors/situations" (Ross 1977: 173)). This simplified view can be represented graphically in the form a relationship between independent variables (evading the teacher's attention) and the dependent one (taking the shape of a learner's utterance):



The attribution error in question can take a different form and be either beneficial or detrimental to the learner, depending on how familiar the learner is with the subject matter and how well s/he demonstrates it by means of language<sup>5</sup>:

Table 1.	Four types	of knowledge-	language	relationship	and	respective	attribution	errors
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Learner	Type represented by the learner	Direction of influence of language skills	Variant of basic attribution error	Impact for the learner	Possible label
L1	knows a lot and speaks/writes nicely	inflating	angel halo effect	beneficial	'walking encyclopedia'
L2	knows little but speaks/writes nicely	inflating	leniency effect	beneficial	'beats about the bush'
L3	knows a lot but speaks/writes poorly	depressing /deflating	first-glance effect	detrimental	'uncertain of oneself'
L4	knows little and speaks/writes poorly	depressing /deflating	satan halo effect	detrimental	'lazybones'

The four variants of the error are represented by the four commentaries cited in section 1.2 of this text. All four interpretations of the language educational events they refer to are at least partially dubious: Commentary 1 (inflating the teacher's evaluation) follows the reasoning "because the learner speaks/writes about an issue vividly and with conviction, s/he feels that issue and knows it well", which may be too prompt a conclusion, not to mention the remark that the teacher "can see Anne thinks properly"; Commentary 2 (inflating, too, but starting from a lower level of the learner's competence) relates to a learner who presents very few subject specifics but is still seen as well-oriented thanks to the involved language used, with the (clement) teacher's interpretation proving that "who seeks shall find" (and so the learner may not need to try

<sup>&</sup>lt;sup>5</sup> The table below has been derived from a similar one presented in one of the two conference texts ("XIV KDE") discussing language bases of educational diagnostics.

too hard to demonstrate very specific knowledge); Commentary 3 (depressing<sup>6</sup>) appears to fail to recognize the fact that Ola may find it hard to verbalise what she knows (especially in the case of discipline that itself, by definition, is difficult to put into words) and the error seems to consist in the simplistic belief "if she knew, she'd say"; Commentary 4 (depressing, too) is particularly harmful to the learner, with the teacher finding in the learner's plain utterances confirmation of prior hypotheses stipulating that very little knowledge has been acquired; as noted earlier, Sławek's brevity may follow from his understanding of how the subject school be learnt and his limited (for untrained) ability to present what he knows.

The above shows that to conduct classroom diagnostics of the learners' utterances certain rules need to be devised and must be applied with regard to language educational events. Four rules pertaining to the four cases above have been proposed by the author earlier, with the two chief proposals having been made by them (two rules per either proposal):

- Do not view proper language forms as unambiguously indicative of subject competence.
- (ii) Do not view improper language forms as overtly indicative of subject ignorance.

The "improper" language may be – wrongly and detrimentally to learners - seen by teachers as any form of language that departs from that introduced by the school or the classroom; taking into account the fact that the learner's colloquial language allows one to emanate one's own self in contacts with another man (Aleksander 2009: 41).

It follows from the above that disrespect of language issues jeopardizes validity of educational diagnostics as without sufficient attention being given to the language of utterances the construct of diagnostics remains partially vague. Conversely, adequate recognition of the learner's (individual) language used is tantamount to recognition of their personality and their experiencing of education.

<sup>&</sup>lt;sup>6</sup> The adjective needs to be read not in its emotional sense (equivalent to 'upsetting') but rather as denoting a reduction in the value of the language encountered (as in economics, where it is opposite to an increase or inflation. The analogy to economics is by no means accidental here for the learner's utterances can be seen to "sell badly or well").

<sup>&</sup>lt;sup>7</sup> The previous analysis presented at one of the KDE conferences addressed the issue of how each of the four rules relates to the relationship between the language itself and the personality or the construct (Daszkiewicz 2008: 327-329).

## 2.2. THEORETICAL STRATUM: Exploiting other disciplines in language-informed diagnostics

The fact that beyond each utterance there is a person implies that each language educational event is a highly personal occurrence. No single utterance produced by two different people is an exactly same event. As a consequence, analyses of language educational events need to exploit all disciplines which help understand the learner's position from different perspectives, be it sociology, psychology or any other social science. Although it is rather obvious that knowledge and language are strongly interwoven and so neither of them can be stripped of the other, there are numerous facets to utterances that render it irrational to view the language produced as if created in a vacuum without a very specific personality. To give an example of the lenses through which learners' utterances need to be construed, we may refer to a few cognitive-psychology-related truths. Namely:

- due to a multidimensional character of knowledge and achievements, analyses of learners' utterances cannot be conducted through the criterion of sequentiality (e.g. no single utterance can be viewed to signify any other preceding or following utterance);
- (ii) due to the unique character of each learner's system of concepts, the most appropriate benchmark for interpretation of learners' utterances could be the other terms, sentences, words, or arguments presented by the very same learner;
- (iii) due to an unlimited number of paraphrases and the arbitrariness of a language sign, no term (word, expression) denoting a given concept can be viewed as better than any other language sign<sup>8</sup>;
- (iv) due to the language shaping the framework of educational practices, that is the fact that it constitutes the means through which rights and duties of school-life participants are created and questioned (Cf. Wawrzyniak-Beszterda 2002: 27), the learner will generally "filter" his or her utterance through the framework established, which means that the utterance heard or written will frequently be formulated in a language which departs from the learner's (emotionally the closest) personal interlanguage<sup>9</sup>.

<sup>&</sup>lt;sup>8</sup> This property of language is also referred to as 'conventionality' (derived from transformational generative linguistics, also known in semiotics). Cf. Kurcz (2000: 38).

<sup>&</sup>lt;sup>9</sup> Introduced first by Larry Selinker in 1972 and frequently referred to in applied linguistics, the concept (understood as a learner's own independent grammar system at any given point of

The analysis of language used is made difficult by the fact of each person experiencing his or her utterance, meaning undertaking decisions as to the choice of words and expressions, having his or her own convictions as to when it is worth using the language and/or finding certain language labels as more suitable, understandable and worth remembering than others. Hence, the theory of language educational events may rest primarily on answers to the following two key questions, which can only be answered by an interdisciplinary approach to educational diagnostics:

Question 1. What qualities of an utterance determine the distance between latent and observable data and determine validity of inferences concerning knowledge made?

Tentative answer: Language educational events become far more informative (i.e. the said distance can be said to be smaller) in the case of utterances marked by redundancy and subjectivity (as opposed to those representing a greater degree of entropy<sup>10</sup> and objectivity). In language terms, the size of distance (and so the degree of certainty of interpretation) seems most linked to, for instance, the use of pronouns, conventional collocations, etc.<sup>11</sup>

Question 2. What amount of observable data can serve as a basis for assessment of latent qualities (i.e. how much text is needed to justify inferences concerning knowledge)?

Tentative answer: Vague as it may sound at first here, there seems to be a point in (our reception of) a learner's utterance at which we, as listeners or readers, have gathered enough textual data to be disturbed by a change in lexis, style, grammar or register.

Language educational events are best to be viewed as one type or one facet of personal educational events: when experiencing by themselves the process of learning or the course of examinations<sup>12</sup>, the learners may or may not choose to articulate their thoughts and thus provide substance for a language-based educational diagnosis. By recognizing the personal edge of their language choices

learning) merits a special place in educational diagnostics (See e.g. Johnson 1999: 174-6).

<sup>&</sup>lt;sup>10</sup> The redundancy-entropy distinction follows the reasoning presented by Friske (1999: 34).

<sup>&</sup>lt;sup>11</sup> More on the issue: Daszkiewicz (2007: 90).

<sup>&</sup>lt;sup>12</sup> An exemplary set of learners' utterances concerning these two issues is discussed in the author's XIII KDE conference text.

and personal decisions, we prevent normalization of their education (and its assessment), whilst the fact that explaining what particular utterances prove is a most taxing challenge must not serve as an excuse for not undertaking to unravel the mental construct behind what the learner says or writes.

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