

THE DIGITAL READING COMPONENT OF READING LITERACY: NAVIGATION, SOURCE EVALUATION AND MULTIMODAL TEXT PROCESSING

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Abstract. *The paper substantiates digital reading as a distinct component of the reading literacy of learners of English rather than as a variant of print reading performed on a screen. Three groups of operations are argued to be specific to the digital environment and absent from the linear printed text: navigation in a hyperlinked, reader-constructed text; evaluation of the credibility of sources under conditions of information abundance; and the processing of multimodal information in which meaning is distributed across verbal, visual and auditory channels. On the basis of terminological analysis, conceptual synthesis, comparative analysis of international assessment frameworks and documentary analysis of coursebook tasks, a system of indicators for each group of operations is proposed, together with a typology of classroom tasks and criteria for their assessment. It is shown that the digital component cannot be developed by transferring conventional comprehension questions onto a screen: it requires tasks in which the reader has to construct the reading path, and to justify the selection and rejection of sources.*

Keywords: *reading literacy; digital reading; hypertext navigation; source evaluation; lateral reading; multimodal text; information selection; English language teaching.*

INTRODUCTION

For a considerable proportion of learners the principal reading experience is now formed on a screen. This changes not only the medium but the nature of the reading act itself. A printed text is given to the reader as a finished linear whole; a digital text is assembled by the reader in the course of reading, from a search query through a sequence of links, and the boundaries of the text are determined by the reader’s own decisions. International assessment frameworks have accordingly extended the construct of reading literacy to include the location, selection, comparison and evaluation of information in digital environments [1].

In classroom practice, however, digital reading is most often treated as an organisational convenience: the same text and the same comprehension questions are simply delivered through a platform. The operations that are actually specific to the digital environment — constructing a search query, deciding which of several results to open, checking who stands behind a source, reconciling contradictory claims, interpreting

information distributed across text, image and graph — remain outside both the task design and the assessment criteria. The problem addressed in this paper is that the digital component of reading literacy has not been described in terms that would allow a teacher of English to design tasks for it and to assess it. The aim of the study is to substantiate digital reading as an independent component of reading literacy and to propose a system of indicators, a typology of tasks and assessment criteria for classroom use.

MATERIALS AND METHODS

The study is theoretical. Terminological analysis was used to delimit digital reading from adjacent notions — online reading comprehension, digital literacy, information literacy — with attention to the object of assessment implied by each. Conceptual synthesis combined the descriptions of digital reading operations proposed in the research literature into a single system of three groups of operations [2; 3]. Comparative analysis aligned the indicators used in international assessments of reading in a digital environment with the learning outcomes of English language courses [1]. Documentary analysis of coursebooks and curricula established which of these operations are represented in current reading tasks. Research on the evaluation of digital information and on the processing of multimodal material provided the criteria applied in the analysis [4; 6; 7].

RESULTS

Three groups of operations specific to digital reading were distinguished, and for each of them indicators and corresponding task types were formulated (Table 1). The first group, navigation, concerns the construction of the reading path: formulating and refining a search query, predicting the content of a link from its wording and address, deciding when to open a link and when to return, and maintaining the purpose of reading across several pages. The second group, source evaluation, concerns the question of who is speaking and on what grounds: identifying authorship and sponsorship, distinguishing a claim from the evidence offered for it, comparing what a source says about itself with what other sources say about it, and reconciling contradictions. The third group, multimodal processing, concerns meaning distributed across channels: reading a graph or a map together with the accompanying text, detecting a mismatch between a headline and the data it reports, and interpreting the rhetorical function of an image.

Table 1

Groups of digital reading operations, their indicators and task types

Group of operations	Indicator of mastery	Task type	Assessment focus
Navigation in hyperlinked text	Formulates and refines a query; predicts the content of a link; keeps the reading purpose across pages	Guided web quest with a fixed question and a limited time budget	Efficiency of the path, not the number of pages opened

Group of operations	Indicator of mastery	Task type	Assessment focus
Source evaluation	Identifies authorship and interest; separates claim from evidence; checks a source against other sources	Comparison of two sources making opposite claims	Quality of the justification for accepting or rejecting a source
Multimodal processing	Reads text, graph and image as one message; detects mismatch between headline and data	Interpretation of an infographic with a written commentary	Accuracy of the reading of data and of its verbal rendering

The analysis further showed that the three groups are not of equal difficulty for learners of English. Navigation is constrained mainly by linguistic resources: a reader who cannot rapidly assess the relevance of a headline will open every link. Source evaluation is constrained mainly by background knowledge and by the habit of asking about authorship at all. Multimodal processing is constrained by the ability to move between a verbal and a numerical rendering of the same content. Task design should therefore address the three groups separately before combining them in an integrative task.

DISCUSSION

The results are consistent with the position that reading in a digital environment involves operations that are not reducible to print reading skills [2; 3]. Research on the evaluation of online information suggests, moreover, that expert practice differs from the one usually taught in the classroom: experienced readers spend little time examining the page itself and instead leave it in order to find out what other sources say about it [4]. This has a direct methodological consequence for English language teaching, since the corresponding task — checking a source from the outside — is easy to organise, requires no specialised software and simultaneously develops the linguistic and the critical components of reading literacy.

At the same time the transfer of reading to a screen should not be treated as automatically advantageous. Meta-analytic evidence indicates that, for informative texts read under time pressure, comprehension on screen may be lower than on paper [5]. This does not argue against digital reading; it argues for teaching it deliberately — planning the depth of reading, controlling the pace, and reducing the load created by simultaneous navigation and comprehension. The processing of multimodal material is subject to the same consideration: additional channels help only when the verbal and the visual are coordinated rather than duplicated or presented simultaneously in a competing form [6; 7].

The limitation of the study is that it is conceptual: the proposed indicators and task typology have not been tested empirically. Subsequent work may involve classroom trials,

the observation of learners’ navigation paths, and the analysis of the relation between the quality of source evaluation and the general level of language proficiency.

CONCLUSION

Digital reading is a distinct component of reading literacy, defined by three groups of operations — navigation in a reader-constructed hyperlinked text, evaluation of the credibility of sources, and the processing of multimodal information — none of which is required by a linear printed text. For each group observable indicators, a corresponding task type and an assessment focus have been proposed. The principal methodological conclusion is that this component is not developed by moving conventional comprehension questions onto a screen: it requires tasks in which the learner constructs the reading path independently, selects among sources and justifies both the selection and the rejection — and it requires assessment criteria that reward the quality of that justification rather than the correctness of a single answer.

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