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Abstract

The relevance of qualitative research to virtual practices rests on subject knowledge and practical know-how on operations for exchange, growth, learning, and dialogue. Highlighting the discursive perspective, this paper covers theory on emerging didactics for online learning. In doing so, the contents show how computer-mediated learning incorporates a dialogical orientation. There is an empirical account of experiences of applying the theory in a comprehensive Nordic network with an aspect of computer-mediated theory focused on Ba, a construct illustrating how educators and pupils keep their higher mental operations creative in the process of critiquing and applying knowledge in English as a foreign language. The paper explores the social nature of learning, emphasizing the dialogical perspective, weaving methodological consistencies, and principles and theoretical positions with recent conceptual elaborations that focus on knowledge creation in emerging realities. Ideas about action learning provide an overview of issues particular to research on virtual discursive interaction.

Keywords

Methodology, Dialogism, Information Systems/Theory, and Learning

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Qualitative Research on 'Mediated Dialogism' Among Educators and Pupils

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The relevance of qualitative research to virtual practices rests on subject knowledge and practical know-how on operations for exchange, growth, learning, and dialogue. Highlighting the discursive perspective, this paper covers theory on emerging didactics for online learning. In doing so, the contents show how computer-mediated learning incorporates a dialogical orientation. There is an empirical account of experiences of applying the theory in a comprehensive Nordic network with an aspect of computermediated theory focused on Ba, a construct illustrating how educators and pupils keep their higher mental operations creative in the process of critiquing and applying knowledge in English as a foreign language. The paper explores the social nature of learning, emphasising the dialogical perspective, weaving methodological consistencies, and principles and theoretical positions with recent conceptual elaborations that focus on knowledge creation in emerging realities. Ideas about action learning provide an overview of issues particular to research on virtual discursive interaction. Key words: Methodology, Dialogism, Information Systems/Theory, and Learning

Professional educators combining virtual and classroom resources and helping pupils compose narrative texts is a feasible backbone for a project sponsored by the Nordic Council. Nordplus 890/2002-03 is a network for developing teaching and learning of English as a foreign language (Tale). This text is a half-time analysis of processes and results for helping pupils strengthen their ability to compose narrative texts.

Activities are shared between some 500 class teachers, pupils, researchers, teacher educators, and student teachers. Partners represent 20 institutions of higher education, all related to teacher education. Student and class teachers design and apply classroom experiments during physical exchanges in local practice schools. Intermittent virtual exchanges supplement situated classroom activities by narrative texts, peer response, homepage design, and chat board interaction. The general assumption is that pupils will improve their ability to write in English by means of teacher instruction, interaction, and the new medium. The purpose of the project is to help educators imagine, create, apply, and evaluate a comprehensive curriculum of adapted method, assignments, tasks, procedures, and exercises for helping pupils compose good narrative texts. Producing and collecting the data is the main activity in 24 practice schools. Response on the pupils' texts in Blackboard is a supplementary activity. Analysis of didactical measures like process writing, narrative thinking, or cross-cultural understanding form other activities. In this article, outcomes are evaluated in terms of mediated dialogism. I define the concept

as one person's understanding of another person's understanding of a shared phenomenon like e.g., pupils' text compositions in a process of meeting, refraction, and renewal of meaning. A re-constructed text-action phenomenon like web-based submissions, and peer response can be analysed from a perspective of "mediated agency" (Wertsch & Toma, 1995). The concept is defined as a discoursed situation where the system administrator is reduced to an instrumental medium, faking a communicative vehicle, and portraying the interlocutors as passive bystanders. Mediated dialogism on the other hand is a social activity where participants influence each others' cognitions, emotions, and propensity for action. It constitutes part of a wider context with its own dynamics and complexity.

The Subjects

Tale comprises of a network of people and schools with a focus on narrative text composition. There are 12 teacher educators, six subject experts, 24 class teachers, 24 student teachers, and about 400 pupils registered in the system. Teacher educators and student teachers participate in physical exchanges with alternating hosts for benchmarking, practical experimentation, evaluation, and dissemination of results. Class teachers and pupils participate in classroom and virtual experiments.

Tale-partners present a varied picture on national structures for delivering education, routines in municipal schools, and number of subjects that student teachers are supposed to learn, master, and teach. Other differences include the size of "partner schools", urban-rural location, skills for using the technology, etc. Similarities cover the age of pupils, design of physical exchanges, Blackboard platform, division of people into pools, triads of pupils, and the use of response persons.

The subjects' activities are negotiated, structured, and evaluated on a continuous basis. Judging by reactions so far, several schools and teacher education institutions will continue to develop their internal routines for e-learning. The advantage of supplying people's concrete experience to a democratic bottom-up design is that participants understand the interplay between physical and virtual activities. They learn to relate between contexts in terms of internal rules and regulations, division of labour, objectives, and external stakeholders like parents or headmasters. Table 1 outlines people, competencies, and sought actions in the Tale-project.

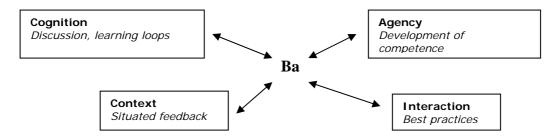
Table 1. Network Description by Significant Dimensions.

Subjects	Competence	Action
Student Teachers	Interactive-Professional	Coordinate
Teacher Educators	Pedagogical-Leadership	Control
Management Team	Strategic-Administrative	Decide
Pupils	Communicate-Reward	Compose

Table 1 summarises Tale and defines opportunities of situated interaction during exchanges and virtual interaction. But some questions remain to be answered: What are the current routines for presenting narrative writing,

introducing pen friends, exchanging texts, responding to peers, and taking individual initiatives? How do such relations change with the introduction of the new medium? Do educator's e-learning experiences affect instruction on how to compose texts?

Figure 1. Influences Related to 'Ba'.



Institutions of higher education form a mix of traditions, ambitions, procedures, and preferences. Skaarup University College is an establishment in Danish teacher education, and Mid-Sweden University is quite young. Tromsø is a small Norwegian unit and Oslo University is quite large. The background of the student teachers is also heterogeneous. After three or four years of full time subject/professional study, most of them start work in municipal schools. But student teachers at Bodø University College, participate in Tale as part of their inservice training, i.e., they attend a program organised by the university for upgrading their competence by practical work in a local school rather than a university program like "normal" students do in Finland or in Sweden. The youngsters make up a group of 11-13 year-old pupils.

The effect of participating on a virtual platform rests on the student teacher's ability to create "pull" by means of their input to the needs of the pupils rather than applying "push" based on the interlocutors ability to deal with a constraining system. The contents and manner of delivering an environment for teaching and learning affects the way people behave in acquiring knowledge in English and teacher-professional competence. It is difficult to assess the degree to which evaluation of formal qualification and/or practical skills is influenced by network participation, but (a) pragmatic interaction skills and (b) subject proficiency in English will evolve, and these aspects rest on a communicative competence to enter and maintain dialogical relations. However, the participants already conceptualise of their classroom environments differently. Judging by their comments, the ability to combine subject and professional aspects of web- and classroom based teaching and learning has improved significantly.

As to the instrument for creating and storing the data, Blackboard, like most educational platforms, provides a number of administrative features. Software limitations make it hard to structure virtual "rooms" for interaction so that every category can interact freely. The launched design was initially negotiated between the system administrator and the partners. However, there is little room for creativity, imagination, and play in the design – other than for suggesting headlines, granting access to courses, or enabling for submission of texts, but Blackboard still provides the necessary stability as an instrument for interaction.

Once the platform was adapted to the needs of the project by features for registration of participants, pool and triad structures, courses, rooms, etc., an

environment for textual on- and offline exchanges was formed. The design provides stability for pupils, student teachers, and teacher educators. The pools have used Blackboard facilities differently. A pragmatic aspect relates to means for sharing assignments, dates, names, homepages, etc. Another pragmatic aspect relates to coordination, planning, and decision-making between pool members. A semantic aspect relates to feedback on narrative texts, use of a virtual library, course documents, and chat – all of which reflect the action, setting, problem, characters, etc. of narrative text. Find an example of a narrative text type (Love and Romance) in the library.

Love has always been a favourite subject of stories. Romantic situations can become very touching stories, even an everyday situation, such as a postman accidentally delivering a letter to the wrong person. Falling in love can be very dramatic, and sometimes a great many problems get in the way before the right people get together and live happily ever after. Stories about love and romance are more often about how difficult love can be than about how wonderful it is to walk on pink clouds in the seventh heaven. In Gone With the Wind, for instance, Scarlett O'Hara and Rhett Butler actually don't like each other all that much even though they can't help falling in love. Love stories can also be full of adventure, and sometimes they are tragic, like the story of Padre Juan and the Apache chief's daughter in the old Wild West.

Tale is a distant field study where the project coordinator controls activities by distribution of administrative and academic information to pools, teams, triads, and individuals. The approach is in line with a definition (Greenwood & Levin, 1998) of action research characterised as social change initiated by researchers and practitioners, who define a problem, generate knowledge, learn about processes, execute techniques, take action, and interpret the results. The theme was originally given by the project coordinator and agreed on by the partners. Some detailed objectives were supported in a written declaration and eventually verified at an Internet homepage. Knowledge-enabling happens on a continuous basis as pupils' texts are composed in classrooms, presented on the Web, read by peers, commented on by student teachers, and stored in virtual portfolios. Primarily class- and student teachers interpret results of motivation, process learning, quality of texts, etc. They also intuitively interpret the results by comparing the pupil's progress with the result of standard classroom methods for text composition.

The coordinator's investment and involvement in the project is expressed in varied mix of roles: initiator, applicant for funding, accountant, report writer, management team secretary, system administrator, course organiser, Ph.D.-supervisor, and computer technician. The main activity is to help teachers and pupils exchange texts and share experiences of semantic know-what contents, pragmatic know-how behaviour, and coordination between project categories.

Impressions suggest that the strength of the participatory project design is on democracy. Blackboard enables for secure and liberal "rooms" or triads of text production, feedback, and interaction. The weakness of the design is the top-down pre-designed structures of the platform shaped as combinations of people with small resources for adaptation to the changing needs of the practitioners. The project is a one-off opportunity for understanding other cultures, values, and traditions and the way they appear as sub-texts in the narrative texts their peers compose. A threat to

the network is the lack of virtual instructors. Once educators participate in teamwork, they seem to prefer a no control situation. Consequently, a lot of energy is directed to the pragmatics of coordination rather than the specialist-professional contents of supporting virtual interaction.

Interaction on a Virtual Platform

Most people would agree on a general definition for virtual action learning, a concept under which practice research, cooperative research, and action research are subsumed. Virtual action learning suggests a joint venture for conducting an interactive praxis oriented field study and for developing activities between practitioners and academics, enabling for learning by a combination of (online) action, and (offline) reflection over their own initiatives. In this article, virtual action learning covers dialogical aspects of action, action learning, action research, and action science as specified for a web-based project organisation. If mediated dialogism were recognised as the proper unit of analysis, what would be the method for describing it? The ambition here is to contribute to people's understanding of the significance of dialogism in human exchange, particularly the way contents and relations are mediated in a modern medium.

Dialogical relations are a prerequisite for networking, and the meaning of "dialogue" is provided in a variety of definitions. All of them however, suggest that social and cognitive processes operate by means of speech defined as interaction. Language is learned from others and initially used for affective functions. Only with time does language contain cognitive-logical properties that result in internalised thought and higher mental functions. Bruner's (1985) introduction to Vygotsky (1962) contains integration of externalised behaviour and internal thought, which contributes to the debate on inclusion-exclusion in descriptions of awareness, sense, value, morality, and truth. The significance of including psychosocial functions to an outline of virtual interaction is that human development depends on culturally acquired physical and mentally processed instruments that influence the behaviour of individual (quality in) Self and general (community with) Other. In isolation, the heart, the hand, and the mind amount to little in terms of development. Only internalisation of action and externalisation of intentions make thought productive. Besides, it is a reasonable assumption that internalisation of dialogue brings language to bear on the stream of thought in a virtual project.

Theorists and practitioners proceed on the beaten track, defining language as the primary instrument for sorting ideas, perception, and action. So, thought and language defined by their dialogical quality are the main tools for participation in human activity. At this point, it is easy to suggest an instrumentalist approach to language-learning whereby the dialogical relation between socio-linguistic concepts like construction, meaning, or discourse is recognised as the instrument per se. An early comment (Levina, 1981) rectifying the crude suggestion suggests that: "speech does not include within itself the magical power to create intellectual functioning. It acquires this capacity only through being used in its instrumental capacity." In providing a combination of ontological and epistemological approaches, proponents of a philosophy of work like Macmurray (1957) indicate the complementary character of interacting contexts, saying: "In acting the body indeed is in action, but also the mind. [...] Action, then, is a full concrete activity of the self in which all our capacities are employed." The practical aspects of situated and virtual exchanges between pupils and educators in a project organisation are

crucial for describing how people use digital communication as an instrument for social interaction, i.e., a method for explaining behavioural and cognitive aspects of cultural development. But, this is true only if people act on instructions.

Communicative competence is Self's ability to engage successfully with Other, thus mastering the conventionalised rules of speech necessary to fulfil a "goodness of fit" employment of virtual universes, text worlds, and oral utterances. As most of the things that people experience relate to communicative systems, signs, symbols and signals, it is a reasonable ambition to define the "blind spot" from which explanatory contributions originate in notions of intention, meaning, exchange, and knowledge. Alongside with the denotative meaning of "language", the agreement of conventionalised symbols like "mediated dialogism" includes a set of observable norms, a coded word-view, or a set of social skills. Dialogical mediation relates meaning to texts, be they focussed on individual thoughts, the world, or Other. Dialogical mediation covers both concrete acts for describing the finalised meanings of the world and abstract ideas for understanding the rather open meaning of utterances by their social function.

Defining Dialogical Mediation

Enlightening the blind spot of research from which mediated dialogism is defined implies a methodological awareness of the impact of continuous relations between thought, purpose, people, and language. Clarifying such a spot also implies that people learn to control social relations by practicing the functions of a virtual system. Positive buzzwords like communication, collaboration, interaction, and dialogue traditionally define an external system and an internal mental context (Bai, 2001). This makes it necessary to help the Tale-project educators investigate dialogical relations. U.S. research on Bakhtin (Hirschkop, 1999) reveals the potentials of dialogue for tracing the generic laws of interaction from a communal perspective.

The [dialogical] process, then, is to multiply enriching: it educates each side about itself and about the other, and it not only discovers but activates potentials. Indeed, the process of dialogue may itself create new potentials, realizable only through future activity and dialogue.

So, mediation between the mind and the world covers discursive interaction and stresses inter-subjectivity before individual subjectivity. Hence, production of individual means like smoke-signal, telegraph, and ICT for understanding other peoples' intentions equals promotion of meaning. And in this way, understanding peoples' intentions becomes a discoursed-pragmatic rather than a text-interpretative phenomenon. Outlines of socio-cultural relationships, consciousness, and subjectivity are usually based on the actor's volition and initiative. Consequently, Bakhtin's heteroglossia is a fragmenting rather than synthesising (Cole & Engeström, 1993) alternative for understanding relations between Self and Other as an individual-collective anachronism over co-configuration of meaning, distributed cognition, learning organisation, or even mediated dialogism.

Just as texts are defined as a stable form of interaction for construction of real life situations, events, and transformation so is dialogical mediation by uses of a web-based technology. Finally, dialogism in a third sense of the word is an

activity formed beyond Self, but it is also an activity filled with content shaped by the speaking-writing subject and listening-responding Other.

The ambition to cover people's consciousness over dialogical relations emerges from an interpretation of Soviet Psychology (Holquist & Liapunov, 1990) saying: "Meaning must be actively produced in an 'aesthetic event' constituted by the meaning of two consciousnesses." Notions of a dialogical Self-Other relation operated by Bakhtinian polyphony and multivoicedness plus culture (Cole, 2003) add to the idea of an expanded image of man's conceptions, i.e., Self's potential for exploring something without actually knowing what to look for.

The other human being whom I am contemplating, I shall always see and know something that he, from his place outside and over against me, cannot see himself; parts of his body that are inaccessible to his own gaze (his head, his face and its expression), the world behind his back [...] This ever-present excess of my seeing, knowing and possessing in relation to any other human being, is founded in the uniqueness and irreplaceability of my place in the world. (Bahktin, 1982, p. 324)

At this point, some conclusions could be drawn about mediated dialogism in virtual interaction: The approach to understanding Self refers to situated exchange of utterances (nomos) rather than to narrowly defined semantic concepts (logos). This stand extends to analysis of texts with an inter-textual character, portraying a "room" to meet Other and illuminating interpreted meaning (mythos). Speech and text are comprehensive units of analysis for clarifying the significance of understanding, learning, objective, and outcomes of virtual activities.

Learning by Ba

In any world, the development of higher mental functions is contingent on the subject's mastering of social means for acting and reflecting rather than talking and manipulating. In acknowledging the historical character of verbal influencing, researchers calculate higher mental functions. Such calculations apply for physical as well as for virtual contexts. The results describe a process where the nature of development changes to socio-culturally guided interaction. In relating between an external dialectic push-need situation in conceptions of development and an internal dialogical pull-resource setting for analysing the semiotic dimension of human exchange, Zinchenko (1985) introduces object meaning, a concept usually deployed for describing the subject's experience of an activity. At the core of the argument lies that Bakhtinian pull defines how people learn from mediating between the designs of virtual applications on the one hand and the significance of the designs for the interlocutors on the other.

In clarifying inconsistencies between tools and meaning/purpose for understanding mediation, it is important to add to the analysis the subject's experience of something that arises from an individual activity, e.g., submission of narrative compositions on the Internet. So, car driving and virtual text exchanges qualify as valid arenas for application of behavioural research. But, the sheer range of everyday and digital extremes makes it difficult to separate learning from adaptation or influencing.

Growth, expansion, and empowerment in virtual learning networks emerged as keywords in an elitist winner-takes-it-all free market culture. Still, the concepts

form a valid focus if divided into a space for describing the frames for generation of new knowledge by mediated dialogism. Design efforts in virtual universes constitute a point of departure rather than a final goal. Nonaka, Kono, and Toyama (2001) provide a contribution to knowledge enabling by introducing Ba (von Krogh, Ichigo, & Nonaka, 2000; Heisig, 2001; Scharmer, 2001), the literal meaning of which is a position in time and space, signifying a dynamic and fluid context for dialogical expansion or "meaning in movement." Ba also signifies dialogue materialising as a practice in which language "speaks" in, by and for itself, thus bringing action, understanding, and emotions to bear on observation, experience, experimentation, and conceptualisation. Ba is a shared physical and virtual timespace existence where innovative processes are conceived, born, and raised. Ba may spread and thrive, multiplying exponentially by the quantity and quality of the people involved. It may survive on its own but also join with another Ba or be reborn as a clone. In order to present virtual Ba as online time sequencing and space access opportunity, virtual learning communities must generate ideas, act on an inside out basis, and turn tacit knowledge into explicit knowledge.

An inspiration to match the turbulent world with a dynamic model for exchange of ideas contains a design for understanding intuitive competences aimed at experiencing flow - a concept similar to Ba and employed for signifying perceptions and conceptions that change the moment people try to understand or explain them. Many forms of knowledge materialise in the virtual world as descriptions of action, willpower, and affection. Consequently, people turn their attention to phenomena that emerge from implicit objectives, sensations, and contradictions. An explanation to such a process is that in search for balances, people try to establish a relation to an abstract reality they somehow conceived of before they learnt to differentiate between ways of the world by sensual perception. Thus, people encompass reality as pure experience by imagining process and result together. The paradoxical combination is labelled action-intuition, a near-identical concept to Ba.

Habermas' (1976, 1979) categorisation elaborates on interaction between communicative structures, Self, and society. On the idea of rational practices in virtual networks, Tale embraces (a) experience about a physical world that Self shares with Other at an interpersonal level, (b) individual experience of Self about his/her world at a psychological level, and (c) norms relevant to Other for understanding knowledge about the world at a social level. In considering the categorisation, people need to intuitively understand the "optical lenses" that reflect the given (a-c) worlds for managing influences, acquisition, development, and dissemination of knowledge. First, social science approaches for understanding dialogically mediated learning covers a basic lens that implies explicit knowledge related to a reality we can observe from the outside. An intermediate lens implies performance related knowledge to be observed from within an activity. An elaborated lens implies self-transcending, not-yet-embodied knowledge, flow, cognitive floating, liberated movement (Bernshtein, 1966) positioned behind learnt conceptualisations of reality.

The suggested epistemology over causes, processes, and consequences emerge from analysis of an interactive virtual medium. Results of the analysis cover a technological-social-cultural structure over behaviour among Tale-project educators and pupils. The purpose of the classification is to describe dialogism by relations between Self and Other as they appear on Blackboard. The analytic frame

represents levels of practical skills and communicative competence that materialise in virtual communities.

Platform Design for Promoting Ba

There are many options for cooperative research to describe how people behave in the new medium. When an interactive field study like Tale, with a liberating, enlightening, and empowering intent meets reality, issues of power and democracy come to life. In recognizing such relations, virtual action learners must account for the consequences of their interventions. They must pay attention to the accuracy and transparency of their approaches. Needless to say, a mix of individual and societal relations specifies the conditions for researchers and practitioners, but they must agree on a course of events and follow it through by keeping motivation and expectations high. So, a tiny minority of the pupils reach and remain at a basic level of sheer action. Most pupils, class teachers, student teachers, and teacher educators reach the more advanced level of (virtual) action learning. Several teacher educators and some student teachers reach the level of action research. Academics, who produce papers, reports, or dissertations on method, reach the highest level of action science.

Tale-project educators interact on a virtual platform and during physical exchanges among categories of network participants. A relevant feature of Tale is to ward off the structural constraints of the determinist Blackboard software. Another feature is to allow for self-control whilst balancing it with curricular focus on English as a foreign language. Due to the fact that the majority of the participants are inexperienced with the new medium, relating between categories of participants is difficult. A lot of text-written diplomacy is needed on behalf of the system administrator. Virtual action learning with a management team and a system administrator at the helm has proved successful tools for "managing" interactions. However, focus on the subject rather than on the pragmatics of dealing with the software had been an optimal outcome of the project design. In spite of this, team building, working, and learning processes make up the backbone of Tale.

Apparently, the software design causes a contradiction to appear between the users' needs for freedom (what, with whom, when) to learn and the resources of the organiser to control interaction by subject contents in narrative texts. A macro level theory of cooperative user freedom and management control involves the given perspective of dialogical mediation plus additional aspects of access, content, space, pace, time, and technology. Supplementary micro levels of interaction describe pragmatic skills and semantic contents, i.e., levels that mediate how- and what-aspects of an activity.

At a low level of interaction, one type of mediation explains how exchange, dialogue, and meaning contribute to a process where traditional education - defined by curricular instrumentation for teaching procedures and learning processes - mediates by structured problem solving initiated by self-controlled teams. At an intermediate level of interaction, mediation explains either the semantic whatcontents that emerge from exchange, dialogue, and sense making or the pragmatic how-skills that help people initiate, make, and share information. At a high level of interaction, thinking, learning, contemplating, and synthesising emerge from exchange between reflective and action oriented practices that mediate by social interaction and exchange of creativity, imagination, and play between the users.

So, macro- and micro-levels of mediation illuminate inherent dialectics between the users' needs for context specific flexibility and the system designers' resources to administer stability. But most of all, mediated dialogism is based on individual awareness of the functioning of semiotic exchange. Where virtual interaction takes the shape of e.g., unity between form and content, formation and adjustment of vision plus application of shared knowledge and users benefit from experiences of learning. Describing how such development is accomplished requires a method for interpreting the process as mediated dialogism with a final result of Ba in the produced, collected, and analysed data. Figure 1 describes how interdependencies between boxes operate on people committed to networking, i.e., a virtual "context" that affects the interlocutor's "cognition" by action science about a phenomenon by means of "interaction" by action learning/research or individual "agency" by action. This is a way of showing how parallel physical and virtual structures influence outside in internalisation and inside out externalisation of meaning.

As well as in a context for producing and collecting data, there is a need to define the context for analysing the data. The unifying link between the contexts (Reason & Bradbury, 2001) is a methodology of action, action learning, action research, and action science. Consequently, research in the virtual world can be made operational for defining dialogism as the unit of analysis by a conscious choice of didactic methods in a virtual setting.

There are several ways of structuring the conceptual field so as to include and relate to communication theory (Berne, 1966). One approach builds on transmissions between tacit and explicit knowledge and a feedback loop for explaining Ba. First explicit knowledge turns into tacit knowledge by means of externalisation of Self, indicating that the sender becomes visible in a process whereby s/he acknowledges "I see you." Then tacit knowledge becomes explicit knowledge by means of internalisation of Other where the meaning of the receiver's message becomes clear to Self, indicating "You see me." Finally, mediated dialogism bridges between the array of concepts, completes the circuit, and describes transformation from given to new knowledge, signifying Ba in a process of both internalisation and externalisation. "I know that you see me, you know I see you, and we are both OK."

Four Step Analysis

It is a relevant objective to accommodate the needs of pupils and educators to inherent resources of the design features of a virtual platform, i.e., components of individual, mediating artefact, and setting. Furthermore, the balances between skills to navigate a virtual system and the pragmatic demands of the system need to be accommodated. Being an educator is an idealist "calling", and many educators reflect (Whitbeck, 2000, p. 134) on their choice of profession: "Teacher training didn't mean anything to me until I saw it and I experienced it. I think that memorizing is different from learning because in real learning you're adapting it to your own life" (Amanda). A Tale-student teacher's submission verifies to the project idea, displaying interest in writing and speech, detachment and closeness, continuity and fragmentation, creativity and memory, process and result, stakeholder and text, meaning and intention plus pupils and texts. Find an excerpt of a submission on Blackboard after an exchange visit. Informed concerns are given over instruction, assessment, and response in the writing process.

During the Tale-project, we have witnessed the difficulties of a lot of pupils when it comes to writing in English. As most of us students/just graduated teachers have experienced a lot of times, it is not very easy to make a text that we ourselves feel very proud of or satisfied with. As I write this, I continuously look for the right words—to use, how to make a sentence 'flow', how to make the paragraphs hang together etc. And I am not sure that I succeed the way I want to! To sum up some of these mingled thoughts, I think it is important to do something with our own skills when it comes to writing and giving response to pupils' texts. We so much want our pupils to become good writers, and hopefully, we will see improvements in their texts, but it has become quite clear to me that we need ourselves some more knowledge and perhaps practice when it comes to writing and response, to help the pupils reach their 'proximal' zone.

Generation of writing skills happens on a continuous basis throughout the project as pupils compose texts in classrooms and present them on the Web. Peers and/or student teachers read them and comment on spelling, contents, introduction, vocabulary, etc. Finally, the texts are stored in virtual portfolios. Find examples of variation and progression of style, contents, and length in the pupils' compositions.

Hello! My name is Peter. I am 13 years old. I live in Bodø. In Bodø, there are 60000 person. My hobbies are golf and skiing. This town is small. Is very nice here in winter. I can ski. On summer is very warm and sunny. I can swim and play golf and go out and play with my friends. My birthday is on January. My another hobbies is play and look at TV. I have a brother. My brother is 15 years old. My school is Byskolen. Greetings Peter.

My Christmas. The days were very long. But, I vent with my daddy to Kolding get my mother's aunt. She should spend Christmas together with us. She comes from Germany where she lives. In the evening, we ate turkey and brown potatoes (sugar fry potatoes) and curly kale. For dessert we got 'ris a la mande' (could rice and whipped cream made in to a pudding served with cherry sause.) And so we walked around the Christmas tree and sang some songs, 'Jingle bells, på loftet sidder nissen med sin jule grød and højt fra træets grønne top'. Later we opened some presents. I got some cd and a stereo equipment, a game 'risk', and a knee pad. That's made me very happy. Thats was a good Christmas.

Appearance. He was a man. He was short, and he had light hair. The killer had red bomb, orange knife, and yellow gloves, but he didn't wear anything. But some men said it was Arnold Xman. It happened at the silly daytime, on the department stores pink roof. The killer said he is quilty, but police didn't find any bodies. But the killer said: 'I killed the fly.' I killed it with 2 bombs and knife. Then policemans thinked, he is kidding, but the killer showed the body was really a fly. And some people really said there was two explosions. No one couldn't recognize what kind of fly it was. When the police believed this story, then the murderer was sentenced to prison for two years.

Murder. It was a nice sunny day in Denmark. Roskilde was a very big town with many small streets with few people. Suddenly, people heard gunshots from far away. Suddenly, they stopped because a car passed by. The murderer ran away as fast he could into a dead end, the car stopped at the alley way, and a man came out of the car and said, "Hey Joey come on in and get some more money, okay" then they drove away. The next morning, a man came by and saw the women, he took his mobile phone up and called 911. Six minutes later, the police came with an ambulance and took the woman in the ambulance and drove away to the hospital. The next morning, it was perfect weather to go to the beach. The police found out that woman had no family and that the nearest family was a man named Danny. So the next day, they took out to him, when they came there and told him that she was dead, he wasn't surprised about it. The police got a bit superstitious. So the next day, the police cleansed the house for evidence of the murder, a knife, a gun, or something like that. When they had cleansed the house in two hours, they found the gun that was used to the murder. So, they put him in jail for five weeks until the trial began. Five weeks later, the trial began, and Danny lost it, so he got up to 35-40 years in jail.

Pupils benefit from virtual action learning by executing the pragmatics of Blackboard combined with classroom experimentation. Educators interpret the emerging texts as an outcome of supplied motivation, process writing, exchange visits, and publication. They also interpret the results by comparing the pupil's progress with the results obtained from pupils subjected to standard classroom methods without virtual support from student teachers and peers. From a perspective of cooperative research, it is necessary to create flexible user identities that reflect corresponding democratic roles and functions. Any kind of text contribution can be understood as a socially constructed semiotic game where languages interact, interfere, and organize. Tale-project examples portray educators and pupils, who follow virtual norms relevant to interpersonal relation building. Submissions characterise the interlocutor's ability to operate social relations by integrating semantic what- and pragmatic how-contents. However, most examples suggest that virtual exchanges half-way through the project remain at basic or intermediate levels of interactive quality. Find levels of communicative competence in the following categorisations.

The Novice/Beginner

In the lucky cases, efforts at enabling for new knowledge form a tendency to promote synergy in the flow of information. Modern networks form into virtual learning communities committed to interaction. Young people have the motivation and the technical skills to interact, but have they got the competence to participate in network activities? Can pupils combine semantic contents with social construction of meaning? The first step for describing virtual exchange covers adaptation of textual contents and form to a closed audience. The units of analysis for describing such interaction cover contingency between a pupil and the world by each-thing-has-a-name-mediation. Outside-in processes of internalisation cover the communicative nature of an assumed exchange of meaning where explicit knowledge remains explicit. A pupil's homepage displays semantic-technical

contents of little pragmatic-communicative value but for the techno dreamer, focus is on Self and Text contents.

Intro Message

Hello:) I'm BN, 12 years old, and I live in Xxxxx.

I go to school at XX, and I really like it.

In my spare time, i mostly sit in front of a computer. I program (Object Pascal in Delphi, PHP, mySQL, misc. scripting), make homepages for people, and then just play with it. I'm running a Linux server, which I plan to get up running 24/7, but it isn't running yet.

Personal Information

Well... I wrote it above =P

But... I can give you some computer-info:

Main (Workstation): 500 Mhz AMD Athlon processor, 384 MB SDR RAM, 15,8 GB space Server (Debian Linux): 400 Mhz Intel Celeron processor, 32 MB SDR RAM, 7 GB space Contact at xxx@pc.dk

The text covers contingencies between thought and language by concept formation (PHP, SQL, Athlon, 7GB), presenting the discourse of a computer wizard. Even though the text is produced as a typical school assignment, the writer's initiative is an action for understanding Self through internalisation of meaning, a phenomenon to be understood as simplistic action. The interlocutor acts at a low detachment (Novice/Beginner) level merely operating the context-free features of market oriented business thinking. Communicative consideration for tracing e.g., cause-effect relationships between the submitted contents and the reader's reaction to it, is out of reach. This kind of action represents a basic need to be seen in a first submission among strangers.

Competent Users

Another text example portrays the pragmatic how- and what- endeavours of three pupils learning to build a virtual relation. The exchange provides a second step in a progression of virtual activities where interlocutors display explicit knowledge. Seemingly irrelevant text contents lack the traditional mechanisms of coherence and cohesion for connecting between the users. The example signals a typical discourse between boys bragging about the wealth of their respective families. They understand Self in a rather childish context, which is natural for pupils of their gender and age. Focus of interest is on Self and Other.

Tue Feb 11: Hello everybody! Here's my introduction. J

Mon Mar 24: Do you like pigs? I dont like them so much but my family has 10 cows and 1 dog and 1000 pigs we have more pigs than your family. Hahahaha

Mon Mar 24: Hello. I like to read your message. I have too many fish. I'm 15 years old and live in H. Bye. :)

Tue Apr 1: But my family have 120 cows you remember and I hate pigs and cows too but they taste good

Fri May 23: Yo man. is it fun to have piggs (hehe)

The boys provide a partly successful dialogue by acting out collectively emerging roles of teamwork (presentation, status marker, invitation, adaptation, verification). They enjoy themselves by defining Other, sticking to a shared theme, which they obviously find amusing - a case of action learning where the functionality of the virtual design is at stake.

A mixed-gender example of learning at the same level carries with it an additional indication of social regulation. The comparatively control "free" chat room example describes how pupils learn to interact by a regulative rhetoric measure like "Get a life", thus implying the need for upgrading the contents of the interaction. Focus of interest and motivation is definitely on Other.

- This place is very strange. It like a labyrinth!
- Maybe they'll improve it. Greetings SE
- Yeah... i'm actually right now writing a list for improvenments, and i hope it will be accepted.
- Hi frends . I hate you all
- Sille Sucks Sille Sucks Everybody SuckS!!?!?
- NO XXXX PLEASE DONT LAUGH FOR GOD SAKE!
- Im sorry if i did make enybody sad im sorry! realy im am!
- I couldn't agree more:P
- xxxx suks xxxx suks and evrybody soks.. no just xxxx!!!!!
- what you meen møjn nike=D
- Thak that I desurved!
- get a life XXXXXX
- get a life..
- If I NEED A LIFE XXXX YOU MUST TAKE ATLEAST FEW LIFES!
- That didn`t sounds god!
- Hey! :/ I said that first... get a life... all of you!
- Okay XXXX!
- Okayyyyyyyyyyyyyyy

The style and contents of the exchange is far from fulfilling the requirements of standard English. Still, the pupils seem to enjoy themselves by the sheer manner of the exchange. The contents of their "threads" seem irrelevant, and the technical ability to communicate seems more valuable than the actual contents of the interaction. Both examples indicate the competent user's ability to deal with an overload of potentially relevant elements in a communicative situation. However, communication breaks down because the pupils fail to make decisions based on new and agreed rules of virtual text communication by affective involvement rather than instrumental detachment.

Proficient Users

The third step in implementing creative digital exchanges is a procedure for separating between Self and Other by defining the borders in a conceived virtual community (Wellman & Guila, 1996). Generally speaking, separation between the formative elements and structures of a platform may be offered as a design for differentiating between closed and open rooms where system administrators create

meetings between people and where knowledge emerges as a result of individual entries. Probing such an environment in search for structure, clarity, and direction is a delicate process. The functioning of a classroom-like one-to-many communication arena springs from the visibility of a problem, an urge to respond to problems, and the pursuit of team working. There are limited opportunities for understanding Self in such a setting.

Evidence of the dialogical character of virtual sense making and team building is given in a transcript of a five-minute exchange designed as an online exercise with the interlocutors present in the same room. The impact of the technology appears in the use of mediating words alternating between the spoken and the written mode by see (entries) and talk (write). Submissions operate on both intra- (Yes I can see entries) and interpersonal (I agree...) relations. Focus of interest is on both Self and Other. Find the online discourse of two educators exploring the platform.

Instructor - Hey!

TE1 – Yes I can see entries

TE1 – This is really cool

TE2 – I agree that it is really cool, though we could do all of this using regular e-mail

TE1 – yes that would be just as easy:)

TE2 – Time to talk about something else?

TE1 – Very much! This is boring!

TE2 – What weer we doing before coffee

The communicated content is shaped as peer review for cooperative learning. It operates at several levels of analysis, e.g., use of a platform, learning about Other, and creation of contents. They indicate the social character of understanding, meaning, and learning. Thus, the contents and the manner of the exchange form a portal of knowledge for application and analysis of the exchange itself. Proficient users have the ability to make situational discrimination and associated responses rather than downgrading their input to instrumental skills for conducting a dialogical meeting. Such users "see" with confidence what needs to be achieved in the virtual situation without further consultation, instruction, or support.

Experts On/In Communication

The fourth step in a procedure to enhance dialogical exchange suggests that interlocutors control shared time, gradually acquire the basic values of a virtual community and act on those values. By now, they know how to create discursive feedback loops that help Self and Other evaluate learning, network identities, and membership profiles. Eventually, research will be able to express behaviour in terms of abilities acquired in operations for implementing Ba. An advanced lens for describing such learning covers phenomena usually conceived of as a "blind spot" of expansion, flow, continuity, or dialogical mediation. In verifying the idea of such a dialogic exchange, find an online example directed to planning of a future virtual exchange. The dialogue directs the speech-thought and act-behaviour of the educators towards decision-making. Their inter-psychological functioning is reified as threefold Self-contents, Self-medium and Self-other scale. By deploying an advanced lens perspective to the interlocutor's interaction, the functionality of

dialogue becomes apparent by the methodological approach to action and reflection. Multiple foci of interest is on Self, Text (contents) and Other.

HT > I understand from the background noise that you are having some kind of party.

HT > I can tell by looking at my monitor that you have joined now!

MA > No, I have four children and they make so much noise that it sounds like a party!

MA > It is the last day of summer and a very mild 30 degrees - I hate summer. On average we have 40 degrees both day and night.

HT > No, that sounds terrible. We had frost last night and this night as well. How do you feel about the delay - how many people could reasonably participate in a conference - is it enough with two, three or four?

MA > I feel that the frustration levels of the participants would make it 'unnaturally' slowly and affect the flow of information but, if it was announced before hand the way it operates and the expected time delays - this may assist.

MA > Sorry about my spelling - it is terrible.

MA > Perhaps if there was a chairperson?

HT > How many people should we include in the 'conference' with POOL X people in X? What categories of people?

MA > I am finding that I have to refresh the site to receipt your messages...how about you? The people numbers, firstly how many do you anticipate? And could some of these people be observers?

HT > In the virtual conference, we are planning between yourself and the POOL X-people in X there are three teacher educators, six student teachers two class teachers and myself present. I'll introduce this Bb-facility to them in the morning and then we will make contact with you. So, I want to know how many and what category of people we should invite to our virtual conference? I think we have to reduce the number or take turns in communicating.

MA > That would seem the most effective way. Perhaps by hooking up the screen on a projector, this would allow everyone to see the exchanges and perhaps pose questions to the person that is typing?

HT > That is a very good idea if we all sit in the computer room. I'll suggest this to X and also I think that you could make further arrangements with her just to make sure that everything in the technology and in settling times (X hrs time difference) with her directly as she is hosting the meeting.

MA > Sounds wonderful. Tell me, are you satisfied with how things are progressing? Do they reflect what you originally anticipated? Hey, I think I spelt all of that correctly!

HT > I think that the project is progressing according to anticipated progress. However as there are so many categories and such a large number of people in different cultures, we have to be pleased with the way 'production of texts' (main activity) is moving forward. My main concerns are 'lurking' and visibility of communication. Of course, I will also clarify to X. Thank you for this chat, sorry that we had to bother you at home. I will go to the canteen and have lunch. MA > Please don't apologize - it is great fun! Enjoy your lunch and I look forward to chatting again soon - Bye HT

These educators adhere to the rules of an agreed interactive game. But, they also play by the rules of a hidden agenda – which for both of them is to understand and eventually explain virtual learning. Their shared unit of analysis is hidden from the text surface and the manner of the exchange, never to be made public as Ba, flow, or a higher mental function. Due to shared knowledge, the interlocutor's exchange is a socio-cultural artefact for explaining mediated dialogism in the Tale-project. This classification is based on the fact that implicit knowledge remains implicit. However, the attraction of mediated dialogism lies in the use of an unbroken chain of time for action by writing/reading and space for reflection over planning/deciding. Chat exchange contents covers egocentric speech and public discourse equally, thus visualising and turning continuous the intersection between implicit and explicit knowledge. Expert users know how to produce a creative response through immediate discrimination processes and situated responses.

Synthesis of Perspectives

The context for investigating Ba has proved a successful "nomos" (narrative universe, tacit convention) for recognising the impact of instructor agency, school/virtual context, and peer interaction. It has proved less successful "logos" for investigating cognitions related to learning loops. Research has helped educators understand the importance of instruction by clarity, self-control, and feedback. So, mediated dialogism is a balanced set up of structural stability and assignments to promote creative problem solving. Online interactions for investigating Ba depend on best practices related to specific tasks for sharing pragmatic and semantic skills. For a learning context, educators had better trust their pupil's capacity for self-control plus come to grips with a new situation where the pupils decide what, with whom, how, and when to learn.

The pupil's fascination and loving relationship to computers might lead educators to think that traditional school activities may be automatically instilled in everyday teaching and learning routines. Their misconception becomes apparent in a negative text example indicating what happens to language, style, and content when a group of pupils are left unattended in an "open" online chat. On the other hand, a positive web log example shows purposeful interaction enabled by an educator's success at integrating classroom and computer room activities under a common theme, Castles and Legends. The pragmatic skills for operating the primary software artefact are irrelevant for the reported case. The secondary artefact of implementing a teaching and learning methodology for interacting with peers is more or less irrelevant. A third understanding of an artefact relates to highly relevant integration between textual writing and graphical building. Pupils need instruction rather than systemic automation to enter a dialogical relationship with the world.

Archive for TALE-POOL_E Nov 13, 2003

AR > Hello. Is there anybody there from Denmark? ML > hi JT > hi JL > moi :) ML > j hello JL > hi m ML > you must speak english

```
ML > ok?
JT > yes
JL > okei
JL > ookei
JL > kool
JT > cool
JL > :P
JT > :D
JL > :D
JT > D
JL > :C
JT > (
JL > __!__
JT > Hi j
JL > hi j
JL > hi r
JT > speak english
JT > iohrio
JL > what is Denmark's like
JT > What did you like most in Denmark?
JT > where is everybody?
JL > hi j?
JT > Hello j
JL > 1'am not jo
JL > 1 am ja!!!!!!
JT > are you going to drink this weekend
JT > what
JL > no
JL > 1 go to danse
JT > dance
JT > Yesiii
JL > how K
JL > :D
JL > homo
JL > :D::D:D:D:D:D:D:d
JL > remember =:)
JT > so
JL > yes
JL > seth :D
JL > :=)))
JT > SUPPO:::)
JL > : \ddot{A}P
JL > :\ddot{O}P
JT > PD
JL > =(])=
JT > =()=
JL > = (-) =
JL > no
```

JL > :D

JL > ;)' JT > Yes

Friday, November 14, 2003

teleport we have found a teleport. Donautal was the name of the world. There was a lot of flowers it was a kind of cookplace ¶ 11:00 AM Posted by Eltang John

teleport Hi lady Di

We have found a teleport in the castle's basement it leads you to a world called Journeys. Journeys are a weird world everything is old. There are things from Egypt and there are old houses with armors inside there are also a big house/Castle that is very beautiful. ¶ 10:52 AM Posted by Driver **second teleport!** Hi Lady Di!

This world is very weird! There is some maps over some lands in Europe and the there is a weird chair that turns around all the time!! You land on a square. ps: there is to a weather map!!!!!:D

The weather to day was very cloudy! ¶ 10:41 AM Posted by Tony Blaer

The last two examples indicate the significance of individual skills, methodological approaches, and relations between text, Self, and Other for understanding Ba as a result of mediated dialogism. At a basic level of blunt action, the virtual platform mediates social relations and text contents. In that capacity, it functions as a motivational software for the pupil's personal-pragmatic learning how to operate the system as novice users. At a level of action learning, classroom instructions and co-construction of peers mediate the pupils' interactions where their social identity is based on typical school subjects functioning as a motivator for turning them competent users. At an even higher level of action research, the pupils identify their activities as part of a network where sensed cultural differences are mediated in the exchange of narrative texts at proficient user level. At an advanced level of action science, the motivational effect of mediated dialogism combines the above influences of software, interaction, and networking where users turn into communicative experts.

Research has helped enlightening the fact that virtual platforms pose didactical demands on teachers, fundamentally different from situated classroom routines and procedures. In order to adapt to a situation of mediated interactivity, educators must (a) identify the potential of virtual meetings by practicing the systems, (b) supply controlled feedback to the pupils, (c) promote self-control in the concrete operation of a virtual system, (d) supply oral instruction rather than written text, (e) adapt to the consequences of low motivation in written text, (f) combine processes of learning for self, for the school and for the virtual network, and (g) uphold a profile for social construction of text (Meaning), skills (Other) and identity (Self).

Summary

This article presents a scenario of processes for action learning by "soft" interactive skills. Hence, the methodological approach for understanding peer, text, and physical exchanges as mediated dialogism rests on individual learning, interaction with peers, and network exchanges for curricular development in local schools.

Several processes operate on virtual interaction. First, the computing machine facilitates how-pragmatics of externalisation for operating the machinery. Second, the symbolic content of texts facilitates what-semantic internalisation of discourse. Third, mental functions have a social origin and to the relationship between external and internal functions for understanding Self can be added a complex of extrovert and introvert orientations for understanding Other.

There are numerous options for analysing virtual communication, but a major division emerges between monologic transfer of declarative contents and dialogical understanding of intention and meaning. Situated online speech and historical offline text contents make up the primary basis for explaining-understanding interactive behaviour and interpreting-analysing dialogical text as (inter)action. For schooling, one could add a Socratic function.

There is a difference between situated speech and historical text activities. Pupils' narrative compositions can be accounted for in explorations of portfolios, archives, minutes, and e-mail whereas (inter)action must be accounted for by mediated dialogism and Ba. By identifying a socio-cultural theme like dialogical mediation, this article accounts for the way a linguist of physical tool, instrument, or vehicle may alter the flow, structure, and functions of the user's development from novice to expert learner.

Any intervention implies participation in the evolution of systemic designs for understanding relations between people and the world. Contrary to notions of "cognition in the wild", mediated dialogism suggests that action is desirable, action learning is possible, text is a legitimate outcome of action research, and dialogue is a valid mythos for virtual action learning.

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