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# Vygotsky and the Virtual Classroom: Sociocultural Theory Comes to the Communications Classroom

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# Vygotsky in the Virtual Classroom Sociocultural Theory Comes to the Communications Classroom

As reported in the April 16 edition of the Pittsburgh Post-Gazette (A-11), it is becoming evident, as the financial solvency of public higher education (at least in Pennsylvania) comes into question, that the forum of online-education can no longer be dismissed as a pedagogical fad. Administrators and faculty alike are looking toward this new educational environment as one possible financial mediating factor in restructuring public education. However, as traditional courses are fleeing to the relative fiscal safety of the web (much in the same manner that rats flee a sinking ship) little attention has been placed on how mediated education is impacting individual intellectual, contextualized individual and communal social progress from a human development perspective. Thankfully, there is a body of human development theory that may be reviewed to help guide the pedagogical and learning decisions of this new e-class.

Even as this relatively recent technological revolution in education is unfolding, theory that was proposed nearly seventy five years ago seems to adequately speak to this issue in its ability to address the impact of a changing environment on socio-cultural psychology. Prompted by the radical transformations in his own culture, as a result of the Russian Revolution, Lev Vygotsky recognized that intellectual and physical development did not occur independently from the environment in which they are nurtured (Bozhovich, 2004). In his brief career, spanning barely a decade, Vygotsky was forced to address questions that Western psychologists and educators are only recently asking.

This article examines Vygotsky's Sociocultural Theory in relationship to the virtual classroom. To this end three questions will be addressed:

- 1) According to Vygotsky's theories on learning, how should we conceptualize our learners (and learning) in a virtual environment?
- 2) How can Vygotsky's dialectical approach and the concept of the Zone of Proximal Development be encouraged in mediated interaction (Vygotsky, 1978)?
- 3) How do social dimensions of active learning and problem solving impact intellectual and human development in students' negotiation of meaning in the online environment?

Finally, a case study of a community based project developed for a virtual classroom will be explored. This will lead to a discussion of implications of Vygotsky's theories on the structure of online learning.

#### **Social-Learners in Online Classrooms**

There is a reason that Vygotsky has maintained a loyal following and even now, with the advancement in online-education his theories are providing useful support for the development of learner-centered pedagogy.

His theory makes us aware of our vision of students, for example, children defined by their age and IQ versus culturally and socially stimulated learners. It forces us to formulate our ideal of a teacher, for example, role model versus source of knowledge versus mediator, and so on. (Kozulin, Gindis, Ageyev, & Miller, 2003, p.2)

Recognizing these roles of learner and instructor/mediator in education is imperative if we are to understand our task in curriculum development within the greater social context. Vygotsky acknowledged the basic human processes that guide learning. In this, he looked at the process of learning rather than at the value of the information being learned. He theorized that for humans to reach their fullest cultural development they must facilitate meaningful relationships with others (Kaptelinin, 1999).

To this end, online educators must apply this principle of socially-mediated learning in their classroom and make room for the fostering of these interactions in the classroom (Hughes, Ventura, & Dando, 2004). Some practical applications for instruction would be to vary the types of mediated and non-mediated interactions that take place in the classroom. Instructors can incorporate asynchronous interaction such as e-mail and threaded discussions for basic interactions and can also make room for synchronous instruction through instructional chat rooms, tele-conferencing, and live web-feeds (Reid-Griffin, & Carter, 2004).

Other opportunities exist for educators to encourage social interaction in an educational context. Instructors can assign projects that require students to seek out professionals and experts in their immediate environment in order to complete certain assignments (Hughes, Ventura, & Dando, 2004). Also, through recognizing the inherent diversity of experience in their classroom, teachers can develop opportunities for a free exchange of ideas surrounding guided topics provided by the teacher (Brodin, & Lindstrand, 2004). In this way, students are able to benefit from their shared experiences and are able to develop and test theories in a social context and so make these new theories part of their internalized experience; the very foundation of learning as articulated by Vygotsky.

Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals. (Vygotsky, 1978, p.57)

# The Dialectical Approach and the Zone of Proximal Development in Mediated Interaction

Now understanding the roles of social-learners in an online environment, it becomes necessary to focus precisely on the process of knowledge acquisition, a primary focus for Vygotsky. He believed that meaning and knowledge were negotiated in language and that it was in language that thought and knowledge were internalized. This is an active developmental process (Vygotsky, 2004). Speech becomes linked to thought which is communicated within certain cultural parameters. That thought is then either accepted or rejected by others until finally a core theory (or paradigm) is internalized in the individual (Vygotsky, 1986). This is a process of negotiation that is extraordinarily important in fostering psychological growth. The cultural/environmental component is important to the extent that it expedites or hampers this process (Stetsenko, & Arievitch, 2004).

If learning is indeed part of psychological and physical development as Vygotsky postulates, then the Zone of Proximal Development is the tool or mechanism by which this development takes place. "The zone of proximal development defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state" (Vygotsky, 1978, p. 86). How then can online educators employ this tool in their classroom? First, to satisfy the demands of the dialectical process, educators should encourage and even provide a forum for an un-graded exploration of ideas. This could take the form of specially designated chat rooms and threaded discussions. The instructor could certainly observe and even mediate these discussions but the ultimate goal is to allow for the socialization of language and theory to immerge (Kaptelinin, 1999).

The zone of proximal development can be only be achieved when sufficient opportunity is given for students and "experts" to interact. As Vygotsky noticed, at the beginning of this

process the skill base of the student will be in its infancy however through careful guidance and mediation, a student will advance to a new level of proficiency (Berducci, 2004). This ZPD (though it differs from individual to individual and culture to culture) can be achieved in peer-to-peer tutoring, student-teacher interaction, and even in mentoring or internship opportunities within the community (Brodin, & Lindstrand, 2004). All of these avenues, within reason, should be pursued in the educational arena.

#### Social Dimensions of Active Learning and Problem Solving

In a forum that traditionally isolates students in their educational journey, how can educators assure that students are actively engaged in their education and that that education is providing them with practical problem solving skills? This is probably the most difficult aspect to ascertain in a mediated classroom. It involves not only some trust on the part of the educator but also some self-motivation on the part of the student.

In Learning theories and the design of e-learning environments (2005), the authors suggest that not only course content but also the assessment of content mastery should be a negotiable and multifaceted process. Educators should strive to introduce learners to important concepts in a way that students are encouraged to weigh the value of those concepts for themselves and, better yet, to view those concepts within practical applications. The interconnectivity of data on the web makes online exploration one possible manifestation of this ideal. Students are able to (with guidance) attain information from a vast array of perspectives. In much the same way that they interact with knowledge in social interactions, the web allows for an internal dialogue and evaluation.

Finally, when face-to-face interaction is made impossible by geography or time, some consistent and reliable form of feedback between students and educators is mandatory. Though

it only dimly approximates the real thing, this asynchronous dialogue does allow for guidance, theory checking, and a modest level of social/cultural interaction. While the online classroom has not yet replaced traditional face-to-face instruction in its ability to model problem solving and learning strategy techniques, there are steps that educators can take to make sure that they are giving students every possible opportunity to learn, to grow, and to evolve (Bozhovich, 2004).

In preparation for my own virtual classroom, the foundation of Vygotsky's theories on learning and human development have been examined and have proven to be useful guidelines for conceptualizing the roles of learners and educators in an online environment. By focusing on "how" a child learns rooted in cultural change, Vygotsky proves to be a valuable theorist through which to examine educations new role in mediated distance education (Kozulin, 2004). By focusing on the power of language and social interaction to allow for the process of knowledge internalization (within a cultural context) there are many practical proposals that can be made for assuring that constructivist education remains a learner-centered activity even as the physical center of students is expanding (Sundin, & Johannisson, 2005).

### **Vygotsky Project**

There are only so many times engaged educators can hear their students complain that there is nothing to do in a small rural college town before the drive to guide and teach overpowers them. These teachers then are driven to enlighten their charges and show them the rich cultural complexity that they are overlooking. It is this very drive, guided by the sociocultural theory of Lev Vygotsky that prompted me to create a project for my online Writing For Media class. This is a freshman-level survey course that explores the various forms of media writing from print to broadcast. However, the student make-up of this course makes it unique

among my classes. Within this one section I have honors high-school students, traditional college students, and non-traditional returning adult E-University students. This makes for a challenging mix of both experience and motivation. These diverse backgrounds and life experiences also make this class the perfect pilot test for the application of Vygotsky sociocultural learning theory.

#### **Roles of Project Participants**

Because Vygotsky places so much importance on the role of social interaction in learning, I feel it is important to explore the levels of that interaction that is present in this project design. This project will focus upon three broad categories of interaction for its completion – 1) student-to-teacher, 2) student-to-student, and 3) student-to-community. Throughout the course of this project, constant interaction with the instructor is mandatory. This interaction will come in the negotiation of project choices and in the re-honing of project goals and learning outcomes. Reflecting the mediator role outlined by Vygotsky, the instructor is to serve as a guide throughout the project. While the instructor will not be making hard and fast value judgments about student choices he/she will help to reshape rough decisions and will, through dialectical techniques help students reach a clarity of thought and purpose they were unable to achieve on their own. This too, follows Vygotsky's model of the Zone of Proximal Development.

Students then will draw from their diverse backgrounds and experiences with the local area to guide and shape the project through its development. Since the final project will explore areas of culture, aesthetics, history, and community, students' diversity will allow for a plethora of unique perspectives as well as innumerable possibilities for group observations. Older students with a lifetime of experience in the area will have a very different understanding of community interactions while younger students will provide insight into their generation's

experiences, values, and culture. By choosing groups to maximize diversity, students will be forced into a constant exchange and (re)definition of cultural and psychological symbols. This symbolic exchange, of course, is where Vygotsky locates the cognitive process of learning.

Finally, in designing a community-centered project, students must interact with various members of that community in order to complete the requirements for the project. This element of "active learning" is another element of Vygotsky's theories. By allowing students to experiment and engage in their environment, they will begin to form their own system of meaning and will see, first hand, the practicality of their knowledge. For example, one can look at a building in a community and know something of its aesthetic, its mathematical dimensions, and so forth. However, it is not until a student interacts with another human being that that edifice comes to life. The possibilities here are almost as varied as the members of the community itself. You could speak to a member of the historical society, an older member of the community with first-person-knowledge of the early days of the building, a current occupant of the structure, or even the person who cleans the windows. Each of them would have a different story and all of the stories would enhance not only a student's understanding of the building but also the less tangible human threads that are tied to that single structure.

#### **Project Description**

The basic question is as profound as it is simple. What makes up your community? To this end, students will be given the freedom to explore a wide range of topics; all which seeks to illuminate the answers to this question. Students will first be asked to explore their physical surrounding. They may examine landscape or hardscape. This exploration will be recorded in images. Since the class that this is being implemented in is a Media Writing course, these images must be collected as a photojournalism assignment. However, the nature of the images,

story and even scope of this phase of the project will be left to the discretion of the student-groups (under the careful guidance of the instructor). Students may attempt to broadly document landmarks in the entire town or they may focus as narrowly as a city block or even a single building, structure or natural landmark.

It is during the completion of this first phase that the second phase will begin. From focusing on their physical surrounding, students will be directed to focus on their social surrounding. This part of the project will coincide with the broadcasting section of our Media Writing course. To this end, students will produce a documentary (either for film, radio, stage or other medium to be approved by the instructor) to represent this phase of the project. Again the scope and theme of this assignment will be left to the student-groups. Students may wish to choose a theme as broad as "Doing Business in Clarion" or "Our War Vets." They may also focus on a single person's experiences as a case-study of life in the community.

The final phase of the project will involve all of the print Media Writing formats that students are exposed to in the course – Public Service Announcements, Hard and Soft News, Advertising, and Web Writing. The last phase of the project looks at community service. Students will be asked to perceive a need in the community. As Media Writers, they will use their skills and education to give back to the community that they are now intimately involved with. Students will choose a local cause, a non-profit civic organization, a religious organization, a community activity or any other civically-minded need approved by the instructor and will create a media campaign to address, inform and support this perceived need. Not only will this practical application of their skills to a cause they have chosen result in more engaged and passionate writing, it will also show students how their skills can be employed to make them politically active citizens of their community.

#### Vision

The goal of this three pronged project is to allow students to actively engage with their community, to learn through diverse social interactions and to develop themselves not only as scholars but also a politically active citizens. Though the exploratory topics may be simply phrased, the mediated representation of the students' answers to these questions will reflect the scholarship and rigor of the course. Through utilizing Vygotsky's concepts of social-learning, the Zone of Proximal Development, a focus on the cultural environment as a key factor in both intellectual and physical development, and by creating opportunities for interaction in a typically isolated online environment, this project meets the key pedagogical goals of a constructivist educator... me.

#### **Suggestions for Project Questions and Discussions**

If we are to subscribe to Vygotsky's theory of Social Cognition, positing that a student's culture has a prime influence on their learning and that their ability to problem-solve is developed through mediation by adults and peers, then it is ridiculous to expect students to learn to their fullest potential in the isolation so often present in online education. To this end, this project is designed to force and hopefully model different levels and depths of human interaction. I will break down the project into its three parts and review some suggested questions and discussion topics an instructor could use to facilitate these goals.

#### **Phase One: The Physical Environment**

- What makes a man-made structure or natural feature aesthetically appealing?
- How closely do you observe your physical environment?
  - o From memory, name the colors of the houses on your block.

- From memory, name the last three street signs you pass on your usual route to work or school.
- When was the last time an element of nature caught your attention away from your usual routine? Etc.
- With your project-group, find something in the community that you find to be beautiful and photograph it to tell a visual story that expands our knowledge of our community. You may choose any element in the physical environment. The size and scope of the theme of your photo-essay is entirely up to you. However, the story must be coherent and must use your narrow focus to tell a broader story of the community. Think metamessage here.

#### Phase Two: People in Our Community

- What elements contribute to the demographic nature of your community?
- What social norms and cultural traditions form the basis for the psychographic markers of your community?
- Who are the leaders and moral gatekeepers in your community (from a business, political, religious, or social standpoint)?
- Who are the voiceless in your community?
- With your project-group, choose a human element of your community (this could be a single person or a larger group bound by a common theme) and attempt to recreate their experiences in a documentary format. (The medium of your documentary can be negotiated with the instructor. However, it must ultimately meet the broadcast requirement for the course.) Whenever possible allow the community members to tell their story in their own words.

### **Phase Three: Community Service**

- What are the roles and responsibilities of a Media Writer?
- How can a non-profit/civic organization profit from the employ of a Media Writer?
- With your project group, locate a need within the community. This may be a physical, emotional, informational, or social need.
- Decide who the target audience within your community is for this message.
- Create a multimedia campaign to address this need. You must inform your audience
  about the need or topic and encourage them to take action. You must include a Public
  Service Announcement, Hard and Soft News Stories, Print Advertising/Informational
  Materials and Web Material to complete this campaign. The content, hook, and overall
  style of the campaign are entirely up to the group.

#### **Project Objectives**

This project is designed to challenge students with practical situations and to flex their ethical muscles over problems they are likely to encounter in media writing. First and foremost, this project is designed to allow students to overcome the fear of writing. Through creative writing exercises and practical application of media writing, students will be allowed to engage in the writing process from a myriad of perspectives.

Anyone who is looking for a simple "stylebook to media writing" is sitting in the wrong classroom. Through this project, we will pose far more questions than answers in our attempt to challenge and develop our writing as much as possible. To that end, this class will provide a forum for open, honest discussion of many potentially uncomfortable issues such as race relations, hate, stereotyping, and prejudice (all issues that professional media writers will

encounter). It shall be in this adaptive process of analysis, discussion, and personal reflection that the true learning of this course will take place.

This project will function as a writing workshop. Therefore, students will be expected to maintain the same high level of writing proficiency that will be demanded of them in the field. This will include spelling, grammar, syntax, content, and form. To this end, students will operate in teams to allow them to explore the roles of both writers and editors. This will also allow students' work to be further polished before it is submitted as the final representations of their enquiries.

Beyond the ability to competently engage in media writing, it is my desire to cultivate critical media consumers. Not everyone in this course will become media writers. Therefore, it is my desire to be creating politically active, morally conscious citizens. We thrive in a mass mediated environment where much of what we know about the world is gleaned from media consumption. This is the culture that we thrive in and the very culture, from which Vygotsky suggests we derive the majority of our knowledge. By exposing students not only to a range of media writing but also to diverse voices of human experience, students are invited to reevaluate their role as a participant in the mass media and, to that extent, also in their community. In the words of Immanuel Kant in his Critique of Pure Reason:

All the interests of my reason, speculative as well as practical, combine in the three following questions:

- 1. What can I know?
- 2. What ought I to do?
- 3. What may I hope?

It is my sincerest desire that we will approach a greater understanding of our relationship	
to these three questions.	
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