Metacognitive strategies and academic maturation in writing for academic purposes

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Cognitive and acquisition aspects: 
Self-regulated learning ~ Metacognition

1) it focuses on the role of awareness and executive management of our own thinking which is very much in line with the constructivist theory of learning;
2) it emphasizes personal appraisal which allows us to focus on students’ individual differences in the learning process;
3) it develops with experience and schooling;
4) metacognition is amenable to instruction, and
5) metacognition is closely related both with cognition and motivation (Paris and Winograd 1990: 18-19)
Socio-educational aspects: critical thinking, complexity and intertextuality

• Development of critical thinking as a consequence of critical pedagogy: “education that aims to promote critical thinking must stimulate students to participate in practices with the objective of improving the quality of society for everyone and to participate in the discussion on what exactly is ‘quality’” (ten Dam & Volan, 2004: 373)

• Constructive, bona fidae interaction and heterarchy
• **Complexity**: related to contextualized knowledge construction
• It "takes into account intrinsic, complex interactions among elements/features/particles/human beings and includes all the possibly perceivable facets of their nature into the scientific focus. Complexity assumes that no super-position should be applied in scientific research. It suggests that each and every research phenomena should be analyzed in all its complexity, made out of background information, agents and their interactions. It argues against the ‘research method of special cases’ whose findings are then raised to the level of generalized knowledge." (Filipovic, 2015:31).
• **Intertextuality**: "looking for "traces," the bits and pieces of Text which writers or speakers borrow and sew together to create new discourse" (Porter, 1986: 34)

• The Text in academic research refers to a relevant literature based, autonomous, critical understanding and interpretation of a topic in question, i.e., a new discourse in which a point of view is taken relevant to the specific target audience, or an academic community of practice/interest
• All the above possible only in heterarchic communities of practice
• They encourage students to research subjects and topics they find meaningful in their local, regional, national and international contexts, even when they fall outside of the ‘mainstream’ scientific knowledge
• Academic research and writing is understood “as situated practice within academic communities, through participation rather than acquisition” (Lave 1997)
• Participation is defined as “evolving membership” in heterarchic communities of practice
AWAC: Academic Writing across Continents

- Principal objective of the project: to understand the hazards of the transmission of skills and competences developed throughout Ph.D. program course (through courses in linguistics, languages and language teaching in both countries separately and comparatively) and the impacts of that acquisition over the academic activities that are inherent to doctoral school: participating, researching, reading and writing
The instrument: Textual academic literary – self report

• Developed by the group at Universidade de Sao Paolo, Brasil

• Five domains:
  – Researching
  – Reading
  – Writing
  – Participating
  – The influence of the supervisor
This study

- 6 participants
- undergraduate students, third year of the academic program
- elective course *Strategies in second language learning*

- 6 participants
- doctoral students
- participants in the AWAC project
Researching: Undergraduate students

– focus on description instead of discovery; example:
  “I try to establish a general theme and I try not to make it too wide, but still to have enough material as to be able to explain it. I focus on the explanation by starting off with smaller interrelated units.”

– personal interests; imply a certain level of self-regulation; example:
  “I focus on a topic of interest and on a topic that can be further explored. When it is something that interests me, I am more active and more creative later on.”
Researching: Ph.D. students

- all six doctoral students show a great level of academic maturity and organizational skills in researching (defining the topic, data collection and selection, literature analysis, defining concrete research topics)
Researching: Ph.D. students

- Example of research procedures cited by one participant:
  "Block 1: collecting starting materials (used for constructing theoretical and methodological framework);
  Block 2: reading the collected material;
  Block 3: writing of theoretical and methodological framework;
  Block 4: explaining the relation between the theoretical part and the main research;
  Block 4: realization of the research;
  Block 5: summarizing the results of research;
  Block 6: final conclusions."
Researching: Similarities

• An undergraduate student:
  “I spend most of the time in reading the relevant material, I try to compare different sources and come to a common conclusion. I spend less time in writing the paper since the previous time spent in reading helps me conceive the topic and organize the text.”

• A Ph.D. student:
  “Starting from a field of interest, the first step is usually to study the available literature and identify ‘gaps’ or ‘missing pieces’ in the proposed models or explanations that my research could potentially address.”
Reading: Undergraduate students

• Use of different reading strategies: skimming, scanning, search for the main idea, underlying, making notes, summaries, comments...; example:

  “I underline the key words, sentences, sometimes even the whole paragraphs, then, when I come across the same concepts in different texts, I compare them in order to understand them better, then I combine them, etc.”
Reading: Ph.D. students

- Intertextuality very much present
- All Ph.D. students state that they constantly search for relevant materials, while reading for academic purposes and for pleasure, making interdisciplinary connections among the materials
- All of them explicitly state that they approach the reading process critically
- Problems: understanding of parts of language or parts of meaning of chosen texts
Reading: Ph.D. students

• Example: “I sometimes find it difficult to be open-minded if I have to continue reading something that sounds useless, pointless and lifeless. I have difficulties concentrating on something I disagree with, which I firstly regarded as an immense problem for somebody who wants to be part of academia. However, later on I have found this quite refreshing and it turned to be quite the opposite. Namely, whenever I read something I disagree with, I am eager to finish reading so that I can focus on checking and re-checking the data and discovering who is ‘right’ or ‘wrong’. Of course, I understand that there is no right-or-wrong in this world, nothing is so simple. But this little game of mine keeps me engaged in the topic for as long as I deplete all existing resources regarding that subject.”
Reading: Ph.D. students

• Another example:

“I rely on dedicated reference management software (BibTeX compliant), which allow me to collect my references into ‘projects’ and make notes (and keep track of notes) alongside original papers and books”
Reading one’s own text: Undergraduate students

• Focus on the formal aspect of the text; example:
  “I look for mistakes while reading so that I can correct them.”

• Certain amount of critical self-evaluation through the focus on content and coherence; examples:
  “I read them carefully, attentively, so I can be sure that explanations are well organized and that I have addressed the topic.”
  “When I read my text out loud, it helps me realize what is missing, what is a digression. I accepted the suggestion to finish my papers at least two to three days before the deadline, so in the meantime I read my text aloud as if it weren’t mine. This helps a lot because I’m quite self-critical.”
“I try to establish some kind of a distance between me as a writer and me as an author; because that is the only way I am not biased. I try to perceive my work from the eyes of my imaginary reader, since he is the one I ultimately want to satisfy. If I, as a reader, don’t understand something or think it is insufficiently explained, then I, as a writer, need to think about how to change this. I sincerely hope this is clear and that other people do it too, because otherwise this would sound like a diagnosis.”
Writing and participation: Undergraduate students

– Strongly related with the academic curriculum, lack of self-initiated activities

– Usual academic activities: “reading, writing, presentations, participation in class discussions”

– Different levels of awareness for the target audience; the ideal reader...

  “I don’t think my texts are complicated, so the reader only needs to be concentrated.”

  “The one who wants to understand the essence of the text and to reflect about the written.”

  “This would be the person who knows to make a constructive critique, positive and negative, before I turn in my paper.”
Writing and participation: Undergraduate students

– Orientation toward the teacher, lack of academic autonomy and self-regulation

“Some professors try hard to involve the students and to make us speak with them openly about the course and the studies in general, while others are much more serious and the students have certain anxiety with them, so, even when they make a question, we don’t answer because we’re afraid of making mistakes.”

“Few students do something on their own in order to develop academically. It is necessary that professors demand active engagement, that there is a curriculum, as well as additional activities that will help the student improve.”
Researching and participation: Undergraduate students

• The importance of membership; example:

“Mysel myself and my colleagues were motivated for and incited to do an independent project. In addition, we had homework that helped us improve our academic writing skills. Since there weren’t many students at the course, we felt a comforting collegial atmosphere and we helped each others; for example, I read a paper of a colleague and gave her my comments and vice versa.”
Writing and participation: Ph.D. students

• All the participants strongly agree that “the quality of the produced paper will improve drastically if more people are involved, both in terms of content and proofreading”

• Therefore, there exists a strong sense of membership and good will

• Participation: closely connected with writing:
  “I discuss certain matters with my colleagues, classmates and other peers, I attend congresses and seminars whenever possible and I also think a lot about where I want to go next (in the sense of education) and what I want to achieve. This helps me establish appropriate pace and goal. Conversation with other people and reading is usually where I get my ideas from, so these two processes are inseparable.”
SOCIO-CULTURAL ASPECTS: ADDITIONAL QUESTIONS: Ph.D. students

• Related to pressure from the academic community, adviser, evaluation by journal editors and other members of the academic community
Pressure from the peer group?

• “In the beginning of my Ph.D. studies I felt some kind of pressure regarding publishing papers in journals and my colleagues and I used to have very frequent discussions on that subject. We were insecure about our skills/talent but after publishing first articles, we all felt more confident.

• I try to cooperate with young researchers who I see as good and positive people, friendly, fair, open-minded. We try to be supportive and give useful, helpful advice to each other. There are some young researchers and Ph.D. candidates who have a tendency to show competitive spirit but in a negative way, competing and comparing with others when all that matters is THEIR hard work and pushing THEIR own limits. I have experienced (more that once) benefits from brainstorming and talking to my colleagues. I am sure we all have made each other better researchers by sharing suggestions and comments of different members of academic communities who evaluated our papers before being published.

• I don’t feel any pressure when approaching a research topic because I have made an effort to distance myself from too competitive and ambitious colleagues.”
Pressure from the advisor?

- None, all participants have stated that their advisors have been very supportive, some believe that imposing deadlines might help them become more efficient
Pressure when attempting to publish?

• Some have thought it through very carefully; example:

“This is the point when I start to feel pressure. Both peers and advisers are people whom I know, personified in real human beings, and in most cases I know what kind of evaluation to expect from them. Other members of academic communities (such as reviewers or members of a board) seem more as an abstract force than real human beings and I do feel pressure and even fear from their evaluation. If I think more thoroughly about this, I would say it is fear from the unknown, fear from not knowing whether my research is good enough (creative, innovative etc.) to meet the criteria, or even not knowing what the criteria really are (how strict, thorough and demanding the evaluators will actually be).”
• Or even very critically:

“My greatest fear is that my work would be evaluated by members of academia with an insufficient grasp of the subject matter (general knowledge vs. in-depth knowledge) or who are prejudiced or biased in some pertinent way (e.g. favoring a particular methodological or theoretical approach without disclosing it).”
“When it comes to an evaluation by different members of academic communities, I felt more pressure when I started my Ph.D. studies 3 years ago. I was a very young researcher (I was 25) and I still think the same. That is one of the main reasons I try to stay calm and don’t ‘blame’ myself if I make a mistake. I find all evaluations very useful having in mind that all suggestions come from older and, more importantly, more experienced researchers.

The other reason that helped me not to underestimate myself or not to be too strict with my own work is the fact that I have read many articles published in different national journals (whose authors are experienced and successful professors from different universities) with confusing structure, lack of basic information, vague conclusions etc. In the beginning, I expected to be impressed with every article written by my senior colleagues but than I realized that, like in every job, there are people who are better and others who are worse at doing the same thing.”
• In a couple of cases, almost no anxiety when it comes to academic journals (academic immaturity???)
• But lots of fear when talking about their dissertations (European academic tradition)
Conclusions

• Strategic learning strongly related with the adequate use of metacognitive strategies, which are substantially linked with
  – critical thinking
  – complexity (engaged and proactive attitude)
  – intertextuality (capacity for discovery and creative thinking)

• Metacognition
  – related to motivation and cognition
  – yes, amenable to instruction!
Conclusions

• Critical pedagogy
  – development of metacognitive strategies throughout the higher education
  – heightened academic self-awareness and self-regulation
  – supportive, constructive, *bona fide* interaction and heterarchy
  – “challenges and opportunities for a continual quest for subjectivity and self-identity” (Kumaravadivelu 2001: 543)
Long term objective

• to create a sustainable and continuous support network fostering academic and personal encouragement, self-criticism, self-confidence and inclusion of new researchers, new topics, new research approaches and points of view into a given academic community, and opening up space for their successful inclusion into the larger national, regional and international academic community.
References


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