

SYNOPSIS: A discussion of the history of the educational system in Lebanon and its influences on the teaching of the Arts and Humanities. The article argues the urgency of replacing memory-based pedagogy with active learning methods as a barrier against irrationality and fundamentalism.

Against Irrationality: On Active Learning in the Arts and Humanities

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It can be argued that at its best and most innovative, art is an expression of critical thinking; a judgment process whose aim is to help us decide what to believe or do within a given context using appropriate methods; a “(...) reflective decision-making and thoughtful problem-solving about what to do or believe”, and whose aim is to “analyze the situation, evaluate claims, draw good inferences, supply sound reasons, and check to make sure you haven’t missed something important.”¹ These critical thinking activities are based on a number of mental skills that Bowles has defined as analysis, inference, interpretation, explanation, self-regulation and evaluation². Such skills give an artist the ability to reflect on his own practice, its aims, the elements composing it, the processes constituting its development and its results.

During the course of their studies, fine-arts students are constantly being assessed on their ability to develop artistic ideas. On the more advanced levels, they are frequently encouraged to integrate scientific and philosophical concepts and express critical understandings of particular social contexts. Thus for them, subjects such as the philosophy, history and sociology of art are absolutely crucial both academically

¹ P. A. Facione, & N. C. Facione, “Talking Critical Thinking,” *Change Magazine*, 39, (2007): p.40. Retrieved from: <http://www.changemag.org/>

² D. J. Bowles, “Actives Learning Strategies... Not for the Birds,” *International Journal of Nursing Education Scholarship*, 1(3), Article 22, (2006). Doi: 10.2202/1548-923X.1184

and in terms of developing a relevant role within their own societies. A negligence of these subjects has the potential of turning students into technicians attempting to create decorative objects as opposed to intellectuals able to independently reflect on their own artistic practices and understand the social context within which their artworks will gain meaning and influence.

The development of critical thinking however, is not simply a consequence of *what* is being taught but also, more fundamentally, of *how* things are taught. Philosophy or Art History courses that treat facts and ideas as things to be memorized and regurgitated during exams can actually be a *hindrance* to the development of critical thinking. Such courses do nothing to transform students into independent thinkers. On the contrary, they can potentially instill in them the idea that knowledge is static and that learning is faithful memorization; leading to a dogmatic mindset unable to adapt to change.

Unfortunately, the dogmatic conception of teaching and knowledge is very prevalent in Lebanon and we as university teachers are frequently faced with students unable to think independently, critically or creatively. More globally, the inability of our educational system to provide critical thinking skills is also related to a glorification of irrationality prevalent in Lebanese societies and the Arab world. Such an acceptance of irrationality and superstition is one of the root causes of our society's inability to adapt to change or produce art that constitute true reflections upon it. The reasons for the shortcomings in our educational system are very complex, they have varied and multifaceted manifestations and are related to its history.

Irrationality Glorified

In the 17th and 18th century, the European philosophers of the Enlightenment defended what was then considered to be scandalous ideas; freedom of expression, toleration of differing religious ideas, separation of state and religion, democracy, rule of law and free commerce. All these principles were based on the premise that reason is the only legitimate means of determining what is true and what is not and that in order to understand reality one should use reason in two forms: rational (logic and mathematics as constitutive of the internal coherence of the world) and empirical

(observation of the world through the senses in view of analyzing, inferring and interpreting the rational structure of determined phenomena). Above all things these philosophers opposed dogmatism, the proposition that certain ideas are transcendentally true and should be accepted without question. For the philosophers of the enlightenment, no ideas were to be considered beyond the realm of discussion.

As science progressed, the number of ideas protected by dogma shrank; hypotheses such as the sun turning around the earth clashed with science and lost. Other ideas, such as Darwinism, are still being fought ferociously up to this day but are gaining acceptance by past adversaries such as the Catholic Church.

Science revealed a world more wondrous than was ever pictured in the minds of the Bronze Age peoples who imagined the flat earth and the firmament. No image they produced can equal the glorious pictures of a nebulae as given to us by the Hubble telescope. Even the great Greeks, first to theorize a spherical earth, had no idea of the scope and wonder of the universe they were looking at: Singularities, Big Bang, exploding stars, black holes, relativity, quantum physics, atoms, quarks, and on this small and lowly planet, plate tectonics, genetics, natural selection leading to a mad proliferation of life-forms of exponential complexity, all fitting into an amazing picture that can be overwhelmingly, wondrously beautiful.

The vast majority of our certainties about the world have been acquired through a systematic application of rational and disciplined doubt called the scientific method, a form of critical thinking that has given humanity extraordinary control over reality. Every Engine we use is the result of advances in thermodynamics. Every call we make is the result of studies in quantum physics and whenever we go on a plane, we trust our very lives to the scientific method.

Societies that have not taken advantage of this method have languished, as there seems to be a reverse correlation between a country's level of superstition and its level of development. The reasons for this are not hard to understand; superstitions can be viewed as an inefficient way of manipulating reality. In order to convince ourselves of this, all we have to do is compare how many people were cured by witch-doctors versus the people whose lives were saved by the discovery of Antibiotics.

Thus, nations that rely on science and technology and actively pursue advances in it have more control over reality than those that don't. This is also reflected in military power, political and cultural influence.

The scientific method is based on systematic doubt: deriving laws while constantly questioning both the methods of observation and the validity of conclusions leading to and derived from them. This constant self-reflection upon one's own methods is an expression of critical thinking which has had profound influence on other disciplines such as History and Sociology.

Systematic scientific doubt taught us that winds are not spirits, that people with mental illness are not demon infested; that those who appear that they are thus infested, are deluded and in need of help in mental institutions not in the torture chambers; that earthquakes are not punishment from capricious Gods but the result of the wholly impersonal movements of plate tectonics. Systematic doubt built the world as we know it, brilliant and free, and irrationality is now trying to destroy it.

In Lebanon for instance, we have transformed the glorification of the irrational into a national spectacle. These celebrations of the superstitions reach their heights on New Year's Eve, a time when we await the utterances of television prophets. Thus, every 31st of December, people like Mike Feghaly, Michel Hayek and Leila Abdellatif, are given a triumph, supported by sycophantic presenters who seriously discuss their "powers" and treat their utterances with reverence. Lebanese talk shows, promote an unhealthy voyeuristic fascination with "demons" and mysterious "secret sects", shamelessly parading people with obvious psychological problems in an unconscionable search for ratings, while callously disregarding the harm that such exposure can inflict on these psychologically fragile participants.

Newspapers do not fare any better. Astrologers are given daily columns while science remains largely ignored. Thus, the pre-bronze age pseudo-science of astrology, developed when people still thought that the earth was flat and rested on pillars, is given more space and thus objectively speaking, given more respect than the physics developed by Einstein and Bohr.

If we are to judge from social media comments, the public's response to these television programs is overwhelmingly negative. So much so, that presenters now have to make a show of asking their television prophets "tough" questions. Such journalistic integrity is purely theatrical however as the really tough questions never get asked and the presence of these seers on the airwaves is greater than ever. For despite ferocious public criticism, more airtime is given to such charlatans than scientists, to astrology than astronomy, to herbal concoctions and sham cancer cures than legitimate medicine. The economical logic these television stations and newspaper seem to be following must be based on the assumption that there is a silent public consuming these superstitions. And given the reliability of the system they use to quantify the number of viewers, they must be right. So, why has a large portion of our citizenry abdicated reason? Why are they trying to divine the future using the prophecies of charlatans?

One contributing factor is the Lebanese' feelings of helplessness; a majority of our citizens have the impression that they have no control over their own destinies. By believing television prophets they buy into the illusion that the future is predictable and thus in some measure controllable, alleviating their anxiety and sense of helplessness through a false illusion of control.

There are several historical regional and political reasons for this sense of helplessness, but I believe one of the most fundamental factors is our faulty educational system and its failure to provide citizens with the tools necessary for understanding and exercising true control over their reality.

A Faulty Educational System

The modern Lebanese educational system emerged in the 19th and early 20th century, offshoots of two influences; first, the long-established traditional religious schools both Muslim and Christian, expression of local traditions of learning and reflective of the religiously traditional and hierarchical society which produced them. In these schools, memorization was and continues to be the fundamental teaching

method,³ a natural consequence of a traditionalist society's emphasis on the preservation of accepted opinion, which naturally leads to a pedagogical approach based on arguments from authority as opposed to disruptive skepticism.

The second influence is the European educational system: During the 19th century, as western influence started to be increasingly felt in the progressively weakening Ottoman Empire, European religious institutions like the American protestant missionaries and the French Jesuit order competed for religious and political influence by establishing modern schools and universities, first in Beirut and then throughout Lebanon⁴. These brought with them a deluge of new scientific discoveries as well as philosophical and artistic ideas, which until then had been suppressed in the Ottoman Empire, for religious and political reasons.

This intrusion of Western modern rationality created deep tensions between the worldviews and ideals of the traditionalist Ottoman-ruled Lebanese society and those of the European Enlightenment. With this intrusion, the emphasis placed upon obedience to authority, on the belief in and preservation of traditional opinion had to co-exist with the ideals of free discussion, critical thinking and a concept profoundly subversive of traditionalist ideologies, that truths about the world is not dependent on revealed dogma, but is hypothetical, open to doubt and falsification. The hypothetical – as opposed to revealed - view of truth implied necessary debate, constant verification and most fundamentally and subversively systematic rational doubt as opposed to faith.

This intrusion of rational doubt manifested in the scientific method, philosophical rationalism and some forms of artistic modernity. It created a resistance that has yet to abate, one reinforced by the rise of religious sectarianism during the Lebanese civil war and the subsequent attempt to impose reactionary religious ideas

³ U. Anzar, "Islamic Education: A Brief History of Madrassas with Comments on Curricula and Current Pedagogical Practices," (2003): p.6. Retrieved from, www.uvm.edu/.../madrassah/madrassah-history.pdf - United States.

⁴ S. Kassir, *Beirut*, (Berkeley / Los Angeles / London: University of Berkeley Press, 2010), p. 178 – 179. See also, D., Nauffal, & R., Nasser, "The American Higher Educational Model in Lebanon: Organisational Cultures and Their Impact on Student Outcomes and Satisfaction," *Mediterranean Journal of Educational Studies*, 12(1), (2007). p. 43. Retrieved from: <http://gulib.georgetown.edu/newjour/m/msg03513.html>

in school and universities after the war ended in 1990. One example of the struggle against modern rationality is in the excising or reinterpreting of the teaching of the biological evolutionary theory.⁵ But resistance to rationality and critical thinking manifests in more efficient and insidious ways; not in what is being taught but in *how* things are taught:

One of the most significant factors teachers working within the Lebanese context have to deal with is the passive attitude towards learning acquired by a large proportion of students. Their learning experience during high school is overwhelmingly based on the traditional lecture style; what Revell and Wainwright call the “transmit and receive” model⁶. There are no studies on the prevalence of this method but it seems to be the teaching method of the majority of Lebanese schoolteachers, particularly in the humanities. One contributing factor to the extensive use of lectures is the baccalaureate exam; the official end of secondary school exam required for entering any officially recognized university. This all-important assessment places students under pressure to learn excessively large amount of materials, thus reinforcing their natural tendency to become strategic learners⁷ and forcing them to only undertake work that is related to their assessment.

This situation, where memorization-based strategic learning tends to become the most viable option for success, is made worse by rigid and selective *strategic teaching*: Despite their good intentions, school teachers, which are themselves under enormous institutional pressures, encourage their students’ reliance on memorization by explicitly focusing their pedagogy on passing the exam. They are forced to over-rely on lectures, the most economical means of passing large amounts of information in a structured manner⁸.

⁵ S. Boujaoude, A. Asghar, J. R. Willes, L. Jaber, D., Sarieddine, & B. Alters, “Biology Professors’ and Teachers’ Positions Regarding Biological Evolution and Evolution Education in a Middle Eastern Society,” *International Journal of Science Education*, 7(33), (2011): p. 199. doi: 10.1080/09500693.2010.489124.

⁶ A. Revell, & E. Wainwright, “What Makes Lectures 'Unmissable'? Insights into Teaching Excellence and Active Learning,” *Journal of Geography in Higher Education*, 33(2), (2009): p. 214. doi: 10.1080/03098260802276771.

⁷ C. Rust, “The Impact of Assessment on Student Learning: How Can the Research Literature Practically Help to Inform the Development of Departmental Assessment Strategies and Learner-Centered Assessment Practices?” *Active Learning in Higher Education*, 145(3), (2002): p. 153. doi: 10.1177/1469787402003002004

⁸ V. C. Smith, & L. A. Cardaciotto, “Is active learning like broccoli? Student perceptions of active

While lectures have advantages and in some cases might even be indispensable, their use as sole method of teaching reinforces the role of students as passive learners⁹. Furthermore, it has been shown that the memorization required to pass the assessment in such lecture-style settings does not allow students to integrate the disparate facts and concepts they have learned into syntheses and does not translate well into real life applications¹⁰.

In Lebanon, a significant percentage of teacher in schools and universities and especially those teaching humanities use a particularly rigid form of this traditional lecture style; they simply *read* their courses; students are expected to note down word for word what the teacher has read, memorize it and recite it back during exams. This is one of the ways I was taught in school and after discussions with my own students, it seems that this method is still widely in use today. The consequence is students taking a surface approach to learning, what Gibbs defines as reducing learning to “unconnected facts to be memorized”¹¹ in view of reproducing during the exams what they have learned. This has all the characteristics of a teaching style Gibbs describes as leading towards a surface learning approach, i.e. a “very heavy workload relating [to] excessive amounts of materials” that students have to cover as well as “an anxiety provoking assessment system”¹².

According to Biggs and Tang,¹³ every teaching approach implies its own teaching theory, but more fundamentally it transmits an implicit definition of knowledge as well as methods and standards for determining what is true and what is false. Given the limited academic research on the Lebanese educational system, observations about

learning in large lecture classes,” *Journal of the Scholarship of Teaching and Learning*, 1(11), (2011): p. 54. Retrieved from: <http://www.iupui.edu/~josotl>

⁹ Ibid., p. 55.

¹⁰ M. W. Shreeve, “Beyond the Didactic Classroom: Educational Models to Encourage Active Student Involvement in Learning,” *The Journal of Chiropractic Education*, 1(22), (2008): p. 24. Retrieved from: <http://www.journalchiroed.com/2008Spring/JCESpring2008Shreeve.pdf>

¹¹ As cited in, C. Rust, “The Impact of Assessment on Student Learning: How Can the Research Literature Practically Help to Inform the Development of Departmental Assessment Strategies and Learner-Centered Assessment Practices?” *Active Learning in Higher Education*, 145(3), (2002): p. 148.

¹² Ibid. p. 149.

¹³ J. B. Biggs, & C. Tang, *Teaching for Quality Learning at University*. Third ed. (Maidenhead: SRHE and Open University Press, 2007). p. 251. Retrieved from: <http://www.scribd.com/doc/20312256/Teaching-for-Quality>

its general atmosphere are impressionistic. Yet, despite this limitation one can safely say that a significant percentage of students emerging from the Lebanese system view knowledge, especially in the humanities, as static and behave accordingly. Their standards of veracity are largely based on authority, meaning something is true because someone in authority (usually a teacher) said it was true. They assume that their role as students is to be passive receivers of information and to retransmit back during exams what they have memorized. First year university students are often asking for documents that they can memorize for the exams. Some express great anxiety when told that they are expected to do their own research. The problem is that a lot of teachers *do* prepare such documents thus encouraging a memorization-based learning and assessment approached.

What the memory-based approach is producing are students with the unconscious conviction that to memorize and copy is to know. These students experience feeling of anxiety and helplessness when faced with the unknown since they have no understanding of the critical tools and methods for constructing knowledge and for effectively dealing with new situations, as such they are badly vulnerable to superstition and pseudo-science when promulgated by authority figures.

In fact badly designed lectures are even problematic on the level they most emphasizes, that of memory retention since students are more likely to remember what they have learned themselves¹⁴ and since “Deeper and more elaborate processing is associated with enhanced recall”¹⁵. In a comparison between active and passive forms of learning, Revell & Wainwright argue that active methods of learning are “comparable to traditional lectures in promoting mastery of content but superior in promoting the development of student’s cognitive and communication skills”¹⁶. Active learning has been shown to develop critical thinking, a fundamental necessity

¹⁴ V. C. Smith & L. A. Cardaciotto, Op. Cit. p. 57.

¹⁵ N. J. Slamecka & P. Graf, “The Generation Effect,” *Journal of Experimental Psychology: Human Learning and Memory*, Vol. 4, N. 6, (1978): pp. 592 – 604, as cited in V. C., Smith & L. A., Cardaciotto, p. 58.

¹⁶ A. Revell, & E. Wainwright, “What Makes Lectures 'Unmissable'? Insights into Teaching Excellence and Active Learning,” *Journal of Geography in Higher Education*, 33(2), (2009): p. 211. doi: 10.1080/03098260802276771.

for developing the student's capacity to face real life¹⁷, providing students with the tools to become lifelong, flexible, creative, and self-aware learners¹⁸.

In view of all of the advantages of active learning and in a world where factual content is easily available on the Internet, it seems absurd that we are still forcing our students to invest their time and effort in memorization of information and unapplied concepts and furthermore, that we are still evaluating them in exams where all that is being tested is their capacity to regurgitate what we have taught them¹⁹. Such a pedagogical approach is hopelessly inadequate in providing students the cognitive skills needed in facing the constantly evolving contemporary world leading to a feeling of hopelessness and loss of control and contributes to legitimize a pre-modern, superstition-based view of reality reflected in our television stations' yearly celebrations of the irrational and more dangerously in movements such as Daesh. Yet as a teaching method, pure memorization continues to hold legitimacy and considerable influence in our schools and universities, especially in the teaching of Humanities, because the self-reflection needed to align our pedagogy to the outcome of providing our students with critical thinking skills has yet to be undertaken.

So what other methods can be explored in view of creating critical thinkers and independent active learners? In Lebanon, we need to start to systematically engage students in active learning practices, which fosters analysis, healthy skepticism and an auto-reflective attitude. Furthermore, allowing students to actively and freely engage with knowledge is more respectful of them, their abilities and their integrity as autonomous human beings. The application of this would require a review of our educational system that is well beyond the scope of this paper. Given our limitation, what I will be proposing are steps that can be implemented by individual teachers on a class level.

¹⁷ M. W. Shreeve, "Beyond the Didactic Classroom: Educational Models to Encourage Active Student Involvement in Learning," *The Journal of Chiropractic Education*, 1(22), (2008): p. 27. Retrieved from: <http://www.journalchiroed.com/2008Spring/JCESpring2008Shreeve.pdf>

¹⁸ M. W. Shreeve, p. 23. See also, R., Jowallah, "Using Technology Supported Learning to Develop Active Learning in Higher Education: A Case Study," *US-China Education Review*, 12(5), (2008): p. 43.

¹⁹ C. Rust, Op. Cit. p. 147.

In the following I shall be arguing that the integration of well-designed class discussions should be a fundamental aspect of teaching and learning, that methodology courses need to be given during the first semester of undergraduate studies and finally that research assignments need to be designed as methodological exercises, in view of developing critical thinking skills. The development of these arguments shall be based on research and personal experiences.

Class Discussions

One of the fundamental skills that students must develop is the ability to think critically about unfamiliar concepts. So giving them information to analyze and doing so in a context where they have to discuss and argue their ideas in a structured manner will help them organize, clarify and reflect upon their own thinking and will hopefully give them the courage to critically explore issues that will face them throughout their careers. Furthermore, during class discussions and faced with counter-arguments from the teacher and their peers, students are forced to reflect upon their own methods of thinking and cultural prejudices. Such an auto-reflective attitude is one of the fundamental traits of critical thinking. However, and in order to work, class discussions need to be well designed in view of responding to a number of inevitable problems.

The first problem is time; class discussions can take time away from lectures. This could mean an inability to fit in all the information that a teacher is required to be teaching. So while we may be enabling students and training them in critical thinking, lectures will be getting shorter. This calls for a change in perspective; as discussions are not something to be *added* to class but something that should be *integrated* within the program of teaching and learning itself. This implies a number of adaptations; the first and most obvious is that we as teachers have to re-examine how to use our reduced lecture time more efficiently, but also, as importantly, how to use discussion groups in view of allowing students to learn what we will not be able to teach them ourselves. There is then a need to integrate preparatory reading and research papers. Aligning reading assignments with discussion topics by making the reading requirements the subject of group discussions can potentially solve the problem of factual information. But this poses its own problem; will we be able to get them to

read the materials beforehand? Another complimentary option is to give them short articles or passages that they can read in class before the discussions along with a series of questions they need to answer in writing.

Asking them to write down their answers, contributes to solving two further problems; the first is that of students engagement with class discussions: Having written something about the subject and invested the effort in organizing their thoughts, students are more self-confident and inclined to participate in the discussion. The second is that by writing and clarifying to themselves their own ideas, they avoid the tendency of student to change their answer in view of what they perceive to be the emerging consensus of the majority or what is termed as “answer drift”²⁰.

It is obviously advantageous for students to receive written feedback on the pre-discussion papers. However, constantly giving students written feedback can become unmanageable for teachers due to their course load and the number of students within each class. On the other hand not doing this can cause students to become less and less involved with the process of writing; as natural strategic learners, students will tend to focus on work with grades and/or feedback attached to it.²¹ So, and while they may remain active in terms of oral discussion, the attempt to get them to commit their thoughts on paper can grow less efficient as the trimester progresses. In order to address the issue of progressive demotivation, a teacher can adjust the following:

Instead of asking students to work individually, a teacher can divide them into discussion groups of four or five and ask them to summarize the results of their readings and discussions in a short text. This is then followed by a general class discussion. This technic will significantly reduce the number of papers to be corrected and allow the teacher to give them prompt formative feedback. Based on my own experience, despite having clearly explained to my students that the papers they produce during group discussion will only be given feedback remarks and will not count for their final grades, the care they gave their work is generally comparable to

²⁰ M. S. Sweet, L. K. Michaelson, & C. Wright, “Simultaneous Report: A Reliable Method to Stimulate Class Discussion,” *Decision Sciences Journal of Innovative Education*, Volume 6 Number 2, (2008): p. 484.

²¹ C. Rust, Op. Cit. p. 153.

the one given to summative assessments (ones in which they would be receiving a grade). It seems that it does not matter whether the assessment is formative or summative, as long as students understand that their work is being assessed they will put added effort into it. Furthermore, I did not observe any progressive demotivation.

Breaking up the discussion into two stages, starting with small groups then moving on to a general discussion, has an added benefit; most teachers who try to introduce discussion into class will observe that a large proportion of students do not participate. According to Pollock, Hamann and Wilson discussion in small groups allows for more frequent, less intimidating participation, thus, “small-group discussions are more likely to engage a higher number of students than discussions in large classes, which are often driven by just a few individual students.”²²

A second technic for maintaining motivation, is to introduce peer assessment: this would involve giving students the opportunity of reading and giving formative feedback on each other’s pre-discussion papers. During consequent discussions, a teacher will ask them to justify their feedback in view of helping them reflect back on their own methods of assessment. From personal experience I can summarize that student are highly motivated when they became aware that their papers will be assessed by their peers. It seems they tend to care for their peer’s opinion as much or perhaps even more than their instructor’s. I determined this by the extra care they took in their work whenever I told them that there would be peer-assessment, repeatedly asking for more time to polish their text. The reasons for this is are probably a kind of competitive spirit among the discussion groups as students showed added intensity in defending their own points of view during subsequent discussions. While previously students were discussing almost exclusively with me, they were now often discussing with each other directly; this is something I had rarely seen and while the enthusiasm was highly gratifying this posed its own challenges, not the least of which was trying to moderate the discussion, get students not talk over each other and to listen to each others’ points of views.

²² P. H. Pollock, K. Hamann, & B. Wilson, “Learning Through Discussions: Comparing the Benefits of Small-Group and Large-Class Settings,” *Journal of Political Science Education*, 7, (2011): p. 50.

Another issue is avoiding unfair peer assessments. One has to make sure that two groups never mutually give feedback to each other. So, if a paper written by group A is given to group B, one must avoid giving the paper of B to A. It is always A to group B, B to C and only then C to A. That way a group is unable to retaliate for negative feedback by giving some in return, reducing the risk of tit for tat leading to reciprocal unfair assessments.

Peer assessment is not only effective in maintaining motivation, it can also be effective in helping students understand the criteria and apply them to their own work,²³ enabling them to reflect-back and monitor themselves²⁴. This engagement with assessment will thus foster one essential quality of critical thinking, the capacity to reflect back on their own work in view of constant self-improvement.

Research

Arguably, research is the single most important activity facilitating the acquisition of critical thinking skills. This is where students learn how to read specialized literature and think critically. It is through research that students move away from the view that knowledge is authority-based, “the domain of experts”²⁵ towards one where information and ideals are subject to change and “revision through self-directed critical analysis”²⁶

Welch & Panelli, argue for giving methodology courses to first year undergraduates as a means of making them aware “how knowledge is acquired—even to create it themselves.”²⁷ Failure to teach them methodology while constantly assessing them on research papers can lead to several problems including plagiarism.

²³ C. Rust, Op. Cit. 2008, p. 152.

²⁴ G. Thomas, D. Martin, & K. Pleasants, “Using self- and peer-assessment to enhance students’ future-learning in higher education,” *Journal of University Teaching & Learning Practice*, 8(1), (2011): p. 2.

²⁵ H. R. Searight, S. Ratwik, & T. Smith, ““Hey, I Can do This!” The Benefits of Conducting Undergraduate Psychology Research for Young Adult Development,” *InSight: A Journal of Scholarly Teaching*, Vol. 5. (2010): p. 106.

²⁶ H. R. Searight, S. Ratwik & T. Smith, Op. Cit. p. 106.

²⁷ R. V. Welch, and R. Panelli. “Teaching Research Methodology to Geography Undergraduates: Rationale and Practice in a Human Geography Programme,” *Journal of Geography in Higher Education*, 27 (3), (2003): p. 258.

Research papers should be designed with the objective of turning them into small methodological exercises. Students are given a series of deadlines throughout the semester. The idea is to break down the research assignment into small bits, each with its own percentage of the final grade since continuous assessment spread throughout the whole trimester is better at fostering a deep learning approach²⁸. These small pieces can be made to represent methodological skills we want them to start acquiring, including:

1- Choice of subject: The teacher can either assign or allow students to choose a subject under his supervision, giving them feed-back and support.

2- Research into relevant literature: Students are required to read articles and archive the parts relevant to their own research.

3- Research questions and hypotheses: Students are required to give an account of their readings, ask a question or series of questions that they want to respond to in their subsequent work and provide hypotheses.

4- Organization and structure: Students are required to present an outline where information and ideas are structured in a coherent manner.

5- Writing: Students are required to write an essay where all the previous elements are integrated into a synthesis.

6- Defending their work: Students are required to make presentations followed by a question period in order to defend their results.

Breaking down research assignment this way has a number of important advantages. Firstly students are learning the methodological steps involved in building a research project. Hopefully they are starting to understand how to compare, organize and synthesize information from different sources, ask relevant questions, create outlines of ideas and write academic texts. Secondly students are working throughout the semester and not clustering their workload around set short periods. By avoiding clustering, students are more engaged with their work throughout the whole semester. Thirdly they are receiving constant feedback with its consequent advantages. Fourthly they are following and hopefully learning methodology of

²⁸ C. Rust, Op. Cit. p. 148.

research. Fifthly, by breaking up their work that way, a teacher is hopefully able to spot plagiarism problems before they develop.

Conclusion

The previous suggestions represent modest technics for facing a generalized and profound crisis of reason in Lebanon: an attempt to address an atmosphere of irrationality, consequence of an implicit dogmatic definition of knowledge, both caused and reflected by teaching methods that discourages critical thinking and a faulty educational system that sees students as passive recipient of knowledge as opposed to active participants in its discovery. Our memory-based approach to learning is producing a citizenry unable to efficiently gain control of reality, one that needs to placate feelings of helplessness and gain an illusion of control by listening to mediatized mediums and seers. Faced with enemies such as the Israelis on one side and fundamentalists on the other, Lebanon cannot afford to have a population incognizant of rationality and science, humanity's strongest tools for controlling reality and overcoming difficulty. We need a citizenry able to rationally examine their own reality, construct knowledge and create pragmatic solutions to their problems.

The weak hold on reality that irrationality and superstition implies also has its effects on the arts and the humanities. Memory-based humanities classes, when taught as a series of received ideas to be memorized, are weakening our students' engagement with reality and depriving them of their capacity to reflect and evaluate their own methods of thinking. The dogmatic definition of knowledge in memory-based teaching methods is producing artists that do not reflect upon their own methods, whose practice consists of acceptant imitations of past and foreign ideas resulting in the production of pseudo-intellectual decorative objects.

Art can be a space of rigor and self-reflective rationality, producing beauty precisely because it is a *self-reflective* description of the world. But in order to be able to produce art of such profundity, we need a re-evaluation of our teaching methods. Only when such a self-reflection is undertaken and we have succeeded in producing citizens with critical thinking skills, will we be able to consistently produce great art.

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