International Journal of Multidisciplinary and Current Educational Research (IJMCER)
ISSN: 2581-7027 ||Volume|| 3 ||Issue|| 1 ||Pages 52-56||2020||

Critical Reflection with special reference to Economics and Learning Theories

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ABSTRACT: Economics has always been tough for students with its alien scary terms which makes it a ghostly subject for most of them. Also, with its different modules covering many disciplines such as: Statistics, Mathematics, Politics, international trade,…, etc., the difficulty lies in the different learning theories that should be utilized for each discipline and each level, as well as the variety of teaching and assessment forms each module needs. In this paper, I am going to show how the different modules I taught reflected different learning, teaching and assessment techniques utilizing the two famous theories of Behaviorism and Constructivism.

KEYWORDS: Behaviorism, Constructivism, Learning, Teaching, Assessment

I. INTRODUCTION:

"The difficulty lies not so much in developing new ideas as in escaping from old ones". Although John Maynard Keynes, the great economist of the 20th century, was talking here about economic changes in his famous book "The General Theory of Employment, Interest and Money", yet his quote is relevant to many other aspects in our life including education. Being economist and teaching economics for twenty years now, I am always deriving my philosophy in life from my field of specialization. Economics has always been tough for students with its alien scary terms which makes it a ghostly subject for most of them. Also, with its different modules covering many disciplines such as: Statistics, Mathematics, Politics, international trade,…, etc., the difficulty lies in the different learning theories that should be utilized for each discipline and each level, as well as the variety of teaching and assessment forms each module needs. In the coming sections, I am going to emphasize from my experience in teaching and Post Graduate Certificate in Higher Education (PGcertHE) how the different modules I taught reflected different learning, teaching and assessment techniques by focusing on two main theories: Behaviorism and Constructivism.

Critical Reflection: Critical reflection is the way through which we set our goals, and use the past learning experience to formulate our future actions. In other words, critical reflection leads us to consider the implications of our thinking in real life (Dewey, 1916/1944; Schön, 1983; Rodgers, 2002). In addition, critical reflection helps us in constructing clear questions, examine causality and compare the theory with the practice, which indeed improve critical evaluation and transfer of knowledge (Ash & Clayton, 2009, p. 27). Gould (2012) stated that teacher's development definitely evolves as a result of practice rather than reading theories of learning, in most cases teaching is a skill which is acquired through practice, but this does not undermine the importance of the theory. Kolb (1984) added that it is true that we learn through experience, but we have to make sense of that experience through continuous self-evaluation to improve our practice. Consequently, in the coming sections, I am going to reflect on my own practice of teaching using two learning theories and how it affected my own learning and the students' learning in higher education. Second, I am going to reflect upon my own teaching practices and how it evolved through time with the experience, training and education acquired. Third, I will reflect as well on the assessment techniques used in one of my modules. Finally, I am going to conclude by emphasizing the way I better see myself through the theories I identified throughout the paper, developing at the same time some action points based on the above stated reflective practices.

Learning : The vast array of learning theories that I learned through my involvement in the PGcertHE within activities like Pecha Kucha[1] and several online discussions with my peers are great assets that contributed to consolidate further my experience in teaching. This kind of activity helped me a lot to identify the theories that are linked to my practice of teaching and identify others that might help me with some of my modules. I am going

[1] storytelling format where a presenter shows 20 slides for 20 seconds of commentary each (6 minutes and 40 seconds total).

to reflect on two theories (Behaviorism and Constructivism) due to their relevance to what I am teaching, yet this does not undermine the importance of the other theories, that I lay on sometimes and complement the two main theories of learning that I am using. I came to know that in order to get the best out of people, we need to understand how people think and learn (Bates, 2016). In this case, I cannot deny that a system of rewards and punishment as stated by the **behaviorism** theory of John Watson (1878-1958) is a must especially with first year students. Watson (1919) had the belief that the behaviors that people show is something that can be directly observed and measured, which in turn indicates how they respond to the environment and the stimuli that it provides (Gould, 2012). According to Jonassen and Land (2012), behaviorism is the theoretical foundation for strengthening the communication process between the teacher and the students by adding practice and feedback.

As a teacher of first year modules in economics, it works very well. The students know that if they miss one test or one assignment, the risk of getting low grades is high. That is why it is important to tell the students from the beginning the rewards they will get from succeeding and the penalties of failure (Bates, 2016). Students respond to the stimuli by exerting great effort to get high grades and compensate in case they miss a certain assessment. In all cases, behaviorism is implemented in all modules where I work. Students know about this in advance and act accordingly. As mentioned by Jonassen and Land (2012), human beings are social creatures who realize the importance of feedback from other people to determine their own reality and the validity of their own beliefs.

As well, in more advanced approach to the **behaviorist** theory discussed above, I find the principal of **classical conditioning** introduced by Ivan Pavlov (1849-1936) whereby you condition people to think positively about something, very relevant when I talk about first year students in economics, and fourth year students in a module called econometrics, that I teach. Students, in their first year, usually come with a negative impression about economics from high school. Also, fourth year students always postpone econometrics until the last term because they hear about its difficulty. So, by making them aware of the importance of the subject to them, simplifying it to overcome their negative feelings, providing some easy tasks to let them achieve few successes and being generous in their praising, I succeed to some extent to overcome their fear of the subject as mentioned by Bates (2016). Being observed by another colleague from UK in one of my lecture, she said that I have the ability to demonstrate the importance of the topic and making it simplified and always praise them in case they show active engagement.

Of course, **behaviorism** is not the only theory I am applying with regards to the students. At the end, behavioral theory has its limitations when it comes to delivering knowledge. It is not an appropriate model for interactive teaching as mentioned by Ballard (1987). It shifts the emphasis away from the content and curriculum planning to the process of learning taking place. It is considered an autocratic way of teaching where the teacher is the leader and the students are passive recipients (Amsel, 1989). That is why I adopt another learning theory along with behaviorism to overcome the mentioned disadvantages, which is constructivism where the students here are constructing their own knowledge.

On the contrary, for fourth year students, I rely mainly on a constructivist approach. As mentioned by Gould (2012), **constructivism** is an approach developed within the cognitive learning theory, where the focus is on the learner. The new knowledge in this case is constructed by the students rather than receiving it from the teacher. The learning process occurs whereby the students build their knowledge through experience and creating the cognitive structures in their minds by the knowledge they already have and the new knowledge they receive. This is exactly what I usually do in my classes; as I always spend quite a long time to help extract the information from the students.

So, in my module of Economics of Egypt for example, where I am discussing the economic changes that happened to the Egyptian economy since the 1800s until the present, I leave them to discuss their point of views and analyze the recent changes and problems we are facing. I use to tell them that you are now economists and you studied a lot of economic theories. Your instructors told you what you need to understand, and you built your reservoir of knowledge. It is your turn to get out what you learned and perceive your own thinking. So, I try to involve them in debates and discussions. In that sense, they feel that they are coming up with the material they are supposed to study. At the same time, when I enable the students to participate in debates, they will develop critical thinking skills with other presentation and discussion skills (Healey, 2012). In the same fashion, in my econometrics course, the students are entitled to carry on a project done on two phases, a theoretical part and an empirical part. The groups of students have the freedom to choose the topic based on their pool of economic theories, and they construct their own model with assumptions, collect the data and use a new software to run their regression. Motivating them through giving them the role of economists and researchers, and using **constructivism** in the

two phases of the paper are the final outcome in this case. Although some educators may argue that **constructivism** as a theory is better applied at the higher levels only, yet I find that involving the first-year students in some analysis and application to prepare them for the more in-depth criticism and evaluation later on is important as well. I have a teaching philosophy through which I love to stimulate my students' minds and I want them to develop their knowledge and information by themselves. I prefer to act as a facilitator of the learning process through making the content relevant to the students' lives. So, as mentioned by Pang & Marton (2005), taking as an example economics course, rather than learning the term market price as a pure economic concept, students will be able to develop the ability and make sense of price economically and in everyday situation. I am happy that I was able to use this approach with first year students, as mentioned by my observer in the UK. She said that you were applying **constructivism** with your students, by showing them real examples in class and engaging them more often to tell the information, not receiving it from you. Yet, **constructivism** as well has its critics. According to Anderson et al. (2000), when the students construct their own knowledge, this might come at the expense of the valuable learning time. Constructing knowledge might take long time, leading to low motivation. The learning process could be much more efficient with direct tutoring and more guided practice. I agree to some extent, that is why I have mentioned from the beginning that in my specialization I need to apply different learning theories. Therefore, constructivism alone is not suitable for first year students. They still need direct instruction and more guidance provided through the tutorials, with excessive feedback as well, that I usually do. Unlike the fourth-year students, where constructivism represents the biggest part of the way they are instructed. Yet, they sometimes need some guidance especially before the exams to make sure of how well they can answer.

Teaching: Since I began involved in my profession as a teacher with the range of activities, training and certificates that I received, I realized the extent of development as a teacher that I gained. One of my personal tutors I remember pointed out to the importance of running the lecture through posing a question to motivate the students. I considered what he said actually in my later lectures. In all cases, using questions is essential to help students recall their previous knowledge, enhance their understanding and gain critical thinking skills (Tofade et al., 2013). Later on, when I conducted a lecture watched by the UK observer, I was told first to prepare a lesson plan. I usually know in advance what I am going to do in my lecture, but organizing it this way by timing and the number of activities was really a great idea. I found out that it helped me a lot in class. Of course, I used this frequently later on in my classes. Then, based on the different webinars I took with some distinguished instructors in the UK, I came to comprehend lots of things that I did not recognize though being a teacher for long time now. Breaking the lecture into different activities is something that I implemented later on in my classes and I was praised from my observer for that. I used to talk a lot before explaining the material. Now, I found that engaging the students more through either a flipped classroom or getting the information out of them through the different activities is a way better than before. So, as mentioned by Gould (2012), using variety of resources and activities as a teaching strategy increase students' attention.

As a module leader of both 100 level courses and 400 level courses and as was evident from what I learned from my observers and mentors, and derived as well from the constructivist learning theory, I design my lectures focusing on the intended learning outcomes of the topic to be discussed (ILOs), at the same time I encourage the students' engagement in the different activities conducted. So, according to Biggs (1996), constructivism focuses on learner's activities to create meaning, which have direct implications on teaching and assessment. Biggs (1996) referred to the integration among the ILOs, learning and teaching strategies and assessment by the term "Constructive alignment". So, I try to employ the needed learning activities to build the students' knowledge and building a learning environment with the suitable teaching methods relevant to each stage (mixture between behaviorism and constructivism for 100 level, more emphasis on constructivism for 400 level) to facilitate their understanding and achieve my intended objectives brought together through the activities and the assessment tasks. Yet, in a paper written by Millar and Bester (2008), they criticized the constructive alignment approach in both lacking the human dimension aspect and the socio-cultural as well, that bring diversity by the learners to the learning and teaching process. That is why I try to enhance the students' engagement and inclusivity and motivate them to develop their potential. One of the most aspects that I realized throughout my journey in education is the importance of technology in education. The issue was addressed long time ago as many educational programs proposed new strategies to deal with the challenges facing the teachers' developmental abilities to use technology in the classroom (Tondeur et al., 2011). Technology is something that is indeed needed especially nowadays with more educational institutions reverting to online learning. Working as a traditional teacher for most of my career makes the transition quite difficult and taking some time. Yet, I got involved in several training sessions and exposures to new strategies such as the online quizzes like Kahoot and in the webinars where we use the mentie and the discussion forums as well. I got very enthusiastic and attended a workshop where I can learn how to do the online quizzes and enhance my use of technology in education. Other platforms like

google drive and dropbox that I used in my higher education certificate changed my perception of the way I can handle students' papers and assignments in the future as they reduce paper waste. Video platforms such as Zoom was a nice experience since last term as it helped us, me and the students to meet together as a group to discuss the material and the projects of the students, something which I might advise my students as well working in groups to use to avoid wasting time arranging for their meeting. Yet, some critics emphasize the importance of the formal design of the instructional process in universities, with students preferring it this way and academics as well being more comfortable with the traditional format (Downes, 2008). Although I liked it personally for my own learning, but for the undergraduate level first year students, I think it will not be the most appropriate way of delivering information alone. It could be complementary to other teaching strategies. Yet, for the time being, we should adapt for the frequent use of technology as it could a long term way of delivering information.

Assessment and Feedback: Brown and Glasner (1999) in their edited collection 'Assessment Matters in Higher Education' said:

"Assessment does matter. It matters to students whose awards are defined by the outcomes of the assessment process; it matters to those who employ the graduates of degree and diploma programmes; and it matters to those who do assessing."

One cannot ignore the positive impact that assessment has on the learning and teaching process. So, as stated by Cowan and Cherry (2012), it is the assessment of the students that enable for more in-depth learning. Assessment is divided into both formative and summative. Depending on the level of the students I am teaching, I determine to what extent is the relative importance of each kind of assessment. The main responsibility for assessment is in the hands of the instructor as an individual or a course team (Race, 2009). As a teacher of 100 and 400 level students, I find the formative assessment working more with the higher levels, they always need constant formative feedback on their projects and research papers to feed forward into their final draft before submission for summative assessment. Yet, I leave them to use their own creativity in writing and constructing their projects, with some guidance through the criteria given. I believe in what Race (2005) mentioned that if we are measuring what they are able to do with what information they have processed in their minds from what they thought it turns out to be better. As graduating students, I need to make sure that they are now able to use the information to construct their own ideas and the assessment is based upon this accordingly**(Constructivism)**. It is my responsibility to reflect the performance of these students because they will be employed later based on this assessment. Through this kind of assessment, I am trying to overcome the disadvantages of the traditional forms of assessments that are compulsory from the Higher Education Academy in my country (20% for the Midterm Exam and 40% for the Final Exam). Many traditional forms of assessment used in Higher Education often ignore how to apply knowledge to some key professional situations which is considered more valid and reliable when it comes to getting an appropriate evidence for acquisition of theoretical knowledge (Rami et al., 2009). For fourth year students where the assessment mainly is one project or one article/book review, I encourage forming group projects where they are given the freedom to assign the tasks among themselves, yet some prefer to work individually and I respect their choices. Yet, some students working in groups complain from the free riders where the rest in the group might not work and then their grade could be affected accordingly. Gaining the feedback from students is important for me to change what is needed in the future. As mentioned by Race (2009), how students feel, their attendance, the students' performance in class and in their projects, all help the instructors to make some adjustments in their techniques.

Conclusion and Action Points: Although I consider myself more of a constructivist as a teacher than behaviorist, I find myself obliged to adopt a behaviorist system as culturally it is more convenient to our students. Encouraging a learning environment that motivates them to think positively (an advancement of behaviorism that I like the most) in addition to giving them the ability to construct their own knowledge is my ultimate goal. Therefore, based on my experience as a teacher, I sum up my recommendations as follows:

- Enhance more the constructivist approach by posing more questions and let the students work on solutions.
- Divide the group work into several chunks, each student in the group responsible for his/her part to avoid the problem of free riders and get a valid and reliable assessment.
- Develop the technological competence of teachers to enrich the lectures with several activities like online quizzes and discussion forums.
- Prepare lesson plans to facilitate the development of the lecture given the time constraint.
- Adjust the types of questions more to open questions rather than closed questions.

Just as Keynes said "The difficulty lies not so much in developing new ideas as in escaping from old ones." I gained a lot from my journey as a teacher and I am determined to implement new changes and I found myself accepting these changes even if my traditional way that I was used to for more than twenty years now is haunting me. Yet, with more self-determination and will, the change is coming.

REFERENCES

1. Amsel, A. (1989). *Behaviorism, neobehaviorism and cognitivism in learning theory; historical and contemporary perspectives.* New Jersey: Erlbaum.
2. Anderson, J. R., Reder, L.M.,& Simon, H.A. (2000). Applications and misapplications of cognitive psychology to mathematics education. *Texas Educational Review* (Summer 2000). Available at: http://act-r.psy.cmu.edu/papers/misapplied.html (Accessed: 07 December 2018).
3. Ash, S.L., & Clayton, P. H. (2009). "Generating, deepening, and documenting learning: The power of critical reflection in applied learning." *Journal of Applied Learning in Higher Education*, 1(1), 25-48.
4. Ballard, K.D. (1987). "The Limitations of behavioural approaches to teaching: Some implications for special education." *The Exceptional Child*, 34(3), 197-212.
5. Bates, B. (2016). *Learning theories simplified.* London: Sage Publications.
6. Biggs, J. (1996). "Enhancing teaching through constructive alignment." *Higher Education*, 32(3), 347-364.
7. Brown, S and Glasner, A. (ed.) (1999). *Assessment Matters in Higher Education – Choosing and Using Diverse Approaches*. Maidenhead, Open University Press.
8. Cowan, J. and Cherry, D. (2012). "The learner's role in assessing higher level abilities." *Practitioner Research in Higher Education*, 6(1), 12-22.
9. Dewey, J. (1916/1944). *Democracy and education: An introduction to the philosophy of education.* New York: The Free Press.
10. Downes, S. (2008). *Connectivism and its Critics: what connectivism is not.* Available at: http://downes.ca (Accessed: 07 December 2018).
11. Gould, J.(ed.) (2012). *Learning theory and classroom practice in the lifelong learning sector.* London: Learning Matters Ltd.
12. Healey, R.L. (2012). "The Power of Debate: Reflections on the Potential of Debates for Engaging Students in Critical Thinking about Controversial Geographical Topics." *Journal of Geography in Higher Education,36(2), 239-257.*
13. Jonassen, D. and Land, S. eds. (2012). *Theoretical foundations of learning environments*. New York and London: Routledge.
14. Keynes, J.M. (2018). *The general theory of employment, interest, and money*. Springer.
15. Millar, B. and Bester, M. (2008). "Moving beyond constructive alignment to significant learning." *Higher Education Teaching and Learning Southern Africa Conference,* Rhodes University, Grahamstown, South Arica, 30 November-3December, 1-15.
16. Pang, M., and Marton, F. (2005). "Learning theory as teaching resource: Enhancing students' understanding of economic concepts." *Instructional Science,* 33, 159-191.
17. Race, P. (2009). "Designing assessment to improve physical sciences learning." Higher Education Academy: Physical Sciences Centre.
18. Race, P (2005) Making learning happen, London, Sage Publications.
19. Rami, J., Lorenzi, F. and Lalor, J. (2009). "The application of constructivist assessment practices in a teacher-training programme: a tool for developing professional competencies." *BERA Annual Conference,* University of Manchester, Manchester, 2-5 Spetember, 1-24.
20. Rodgers, C. (2002). "Defining reflection: Another look at John Dewey and reflective thinking." *The Teachers College Record*, 104(4), 842-866.
21. Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic books.
22. Tofade, T., Elsner, J., & Haines ST. (2013). "Best practice strategies for effective use of questions as a teaching tool." *American journal of pharmaceutical education*, 77(7):155.
23. Tondeur, J., Braak, J., Sang, G., Voogt, J., Fisser, P., & Ottenbreit-Leftwich, A. (2011). 'Preparing pre-service teachers to integrate technology in education: A synthesis of qualitative evidence.' *Computers and Education,* xxx:1-11.