www.revistalogos.cl Issn Electrónico: 0719-3262

Artículo de Investigación



Moving Beyond the Contemporary Approach of Higher Education: From Vivekananda's Perspective

Más allá del enfoque contemporáneo de la educación superior: desde la perspectiva de Vivekananda

Recibido: 16-02-2023 Aceptado: 20-08-2023 Publicado: 31-12-2023

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Abstract: This article seeks to provide a deeper understanding of Swami Vivekananda's contribution to the field of higher education. Swami Vivekananda, who was an Indian philosopher, propagated the concept of "Man making" by instilling the ideals of "spiritualism" and "natural learning". Such ideals have gradually developed to be one of the essential prerequisites which the educational system should inculcate. He stressed the importance of a supporting agent in the form of a guide. The latter would direct and further provide a space to allow the natural growth of the child. These two pivotal aspects would contribute to the development of the child. Nonetheless, a balance between the two is also required to trigger a successful learning process. Hence, this work discusses how Vivekananda's ideals would significantly contribute to solving some of the problems that affect contemporary pedagogies.

Keywords: Balance - Creative - Higher education - Natural Learning - Spirituality.

Citación: Mitra, S. y Prakash, G. (2023). Moving Beyond the Contemporary Approach of Higher Education: From Vivekananda's Perspective. *Logos: Revista de Lingüística, Filosofía y Literatura,* 33(2), 310-320. doi.org/10.15443/RL3317

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Resumen: Este artículo busca proporcionar una comprensión más profunda de la contribución de Swami Vivekananda en el área de la educación superior. Swami Vivekananda, que fue un filósofo indio, propagó el concepto de "creación del hombre" inculcando los ideales del "espiritualismo" y el "aprendizaje natural". Tales ideales se han convertido gradualmente en uno de los prerrequisitos esenciales que el sistema educativo debería inculcar. Precisó la importancia de un agente de apoyo en forma de guía. Este último debería dirigir y también facilitar un espacio que permita el crecimiento natural del niño. Estos dos aspectos esenciales contribuirían al desarrollo del niño. Sin embargo, resulta necesario mantener un equilibrio entre ambos para que el proceso de aprendizaje sea exitoso. Asimismo, este trabajo busca abordar cómo los ideales de Vivekananda contribuirían significativamente a solucionar algunos de los problemas que afectan a las pedagogías contemporáneas.

Palabras clave: Balance - Creativa - Educación superior - Aprendizaje Natural - Espiritualidad.

1. Introduction

In order to accommodate the students with the present academic requirements and also to prepare them for meeting the future situational crisis that they might encounter, the term 'blending course' became apparent. It refers to "a systematic combination of copresent (face-to-face) interactions and technologically-mediated interactions between students, teachers and learning resources" (Bliuc, Goodyear and Ellis, 2007, p.234). It varies from learning one's lesson through virtual contents till being physically present in the classroom (Ellis and Goodyear, 2019). The overall things that they would acquire through this method would be depended upon the factors that includes sharpening the cognitive power of the students (Trigwell and Prosser, 2020), the inter-connectedness that they would develop in the course of learning (Hadwin and Oshige, 2011), the positive influence brought about by the complete ambience of the learning space (Ellis and Goodyear, 2016), and lastly, knowing about the use of various tools of education by making the learning process effective (Laurillard, 2013). However, the outcome derived from implementing such pedagogies has made the learning system all the more complicated. To overcome this hurdle, there is a requirement of a novel pedagogical adaptation in the educational system which would not traditionally limit it's believe till analyzing the development of a student on the basis of his adroitness in his academics (Wu, Tennyson, and Hsia, 2010, Han and Ellis, 2021). As, the special expertise lies in being creative, which is the power to see the world through a different lens (Nathan, 2020, p.12). Therefore, it has been a constant try in the academia world to prepare the students in such a framework from a much initial level. Thus, this work would be an exploration to make an in-depth study of the contemporary Indian philosopher Swami Vivekananda's notion of education that has supported the view of incorporating spirituality and enabling natural growth of the child.

2. Vivekananda's Philosophy of Education

The educational philosophy of Vivekananda can be elucidated in one line that, "Education is the manifestation of perfection already in man". Therefore, from that point it could be said, if there is no aspect of excellence in the educational system itself, then it would be a thought in vain to expect the same level of excellence on the part of output delivered by the students. Therefore, 'Real education should enable to find out what are uniquely you. That is what matters in practical life, not bookish knowledge' (Madhavi, 2014). It has been stated that how important it is for an individual to carry zeal within themselves where they would agree to take that extra initiative of diving into the core of the subconscious mind (Shuddhidananda, 2021, p.32). This is necessary for not only understanding the things in a better way but also for transforming the entire procedure of learning into a systematic one. The steps needed for this includes classifying and arranging the different impressions, thoughts, etc. stored up there and control them (Shuddhidananda, 2021, p.32). It is only by attaining a grip over the subconscious section of the psyche, one can get hold of the conscious section (Shuddhidananda, 2021, p.32). Vivekananda's edifice of education was based on the belief of making exploration which would help a pupil to be liberated from all the shackles of exterior bondages and attain calmness and unity amidst oneself and which will also help them attain unity with the surrounding existing around him (Ranganadhananda, 1998, p.159-160). However, he has pointed out that the present system of educating children seldom focuses on developing these postulates. Therefore, he has mentioned that in the Vedanta lies the truest essence of educating a child not only in 'secular' but also in 'spiritual' terms. According to him, 'education is in aparavidya or ordinary knowledge and in paravidya or extra-ordinary knowledge'. Thus, for dealing with this, 'Vedanta prefers to use the term *unfoldment*'. It was due to this reason, Vivekananda has went to frame such a pedagogical structure which would enable the individual to manifest all his 'spiritual possibilities' and it would at the same time show them the path of kindness and benevolence of one and all. He had very clearly remarked that how proper training of a child would make him learn the art of balancing his physical, mental and spiritual abilities. Unable to do so would turn him to be an exploitative personality (Umadevi, 2015, p.272).

3. The Role of Educator Delineated

Vivekananda has accentuated the role of the educator who acts as a catalyst in training the younger ones in the right direction, thereby helping them to grow in a natural way. It can be comprehended through an analogy of a cultivator. A cultivator breaks-open the blockage in order to make the flow of the water smooth. Thus, once he removes that block in between, the source starts flowing by itself reaching the irrigated land, to rejuvenate the saplings. In the same manner, the intrinsic capabilities lying within

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a person will thereby demonstrate themselves on its own "when external and internal obstacles, if any, are removed at the proper time by the teachers" (Walia, 2018, p.21). The term 'external obstruction', means the unequal access to learning options available, differences in terms of earning capability of the families and also unstableness present in the socio-political conditions. On the other hand, 'internal obstacles' deals with the inter-personal terms between the educator and his pupil, the understanding ability of the pupil to take good and sound decisions in one's own private engagements and lastly the pupil's psychological and corporeal strength. All these complications can only be discarded by framing a good educational structure. In Vivekananda's philosophy educator has received more prominence. Vivekananda argues that it is also not justified on the part of the educator to portray oneself as a sole factor behind enabling the complete growth of a child. Vivekananda believes that the role of the educator is so important that he argues that education must be based on the "Taittiriya Upanishad (1.11.2), which gives the instruction: Acharya devo bhava- let the teacher be your God". It goes on to mean that an educator is the ideal persona who deserves to be prayed and should be respected, by his pupil (Walia, 2018, p.24).

4. Accentuating the Emphasis of Spiritualism and Natural Learning in Curriculum

In the western world there is a concept of Social and Emotional learning where the educator plays significant role in the life of the student. Social and emotional learning or SEL goes on to describe a teaching-learning method where the students are taught to analyze and handle the various socio-psychological factors which they encounter around them. It consists of two different features – one is interpersonal and another is intrapersonal. As per the first one, the interpersonal level makes them well equipped with the ways where they might develop deeper and healthier bonds with everyone. On the other side, intrapersonal perspective, enables the learners to be conscious of their emotional outbreak and thereby cope with it accordingly (Oliveiraet al., 2021, p.3; Bahnson et al., 2020, p.29). Here too the educators act as the driving forces, who are responsible for the proper functioning of this pedagogy in any educational institutions. In this process, their own perspective of social-emotional competence and wellbeing goes on create a huge impact upon their pupils (Durlak,et al.,2011, p.405). Their ability to maintain a positive outlook towards life brings a huge impact upon the performance or the output of the pupils in their studies. The task of advocating this concept of SEL is depended upon adjusting the behavioral tendency of the pupils in an institution, where they are teaching and it also acts as a deciding factor about how much better person the student would become, both in terms of career and also in terms of overall personality, once they grow up (Reichl, 2017, p.142; Elias et al., 1997, p.1-2). This happens as there builds up a cyclical relation amidst the educator and the student in terms of

teaching and imitating or learning, which is naturally taken up by the students. As per the findings, it has been stated that the tension that the educator might be undergoing will be automatically carried down to their pupils and this condition is referred to as "contagious" element. Thus, in order to avoid any negative implications from being induced to the students, affectionate behavior on the part of the educator towards the students is necessary. There are certain postulates on which the grasping capability of the pupil is depended. It includes the ways through which the information's are being delivered to the pupils, stress related to the expected output that the educator wants to see from the pupils, the kind of regulation that is maintained within the study hall, overall atmosphere that exists within the campus of the institution, the law and order that the particular place imposes upon that institution and lastly the overall impact that the guardian and the surrounding leaves upon the younger ones, while they are growing up (Durlak, et al., 2011, p.419). Therefore, the importance of SEL lies with the fact that it prepares an individual from a younger age not to blindly follow the system of learning their lessons but they must also learn how to make use of their knowledge in a proper manner. It is necessary to grow up with up a appropriate ethical sense that makes a person behave emphatically to the needs of the other people. They learn to decide and settle for correct things and keep working hard for reaching their pre-decided objectives. As per the findings of Collaborative for Academic, Social, and Emotional Learning (CASEL), a group of five abilities that has been considered to be the prime factors for controlling the SEL. It includes "self-awareness, self-management, social awareness, relationship skills, and responsible decision-making" (Trees and Jackson, 2007). Thus, this system of educating the students can be conceived to be a way in which a live example is being set by the educator for the students to follow (Trees and Jackson, 2007). However, absence of involvement of the guardians or a leader like character makes the process of SEL an arduous venture to get it an acceptance in the institutional level. Rime-Kaufman and Hulleman (2015) had argued that lag in the systematic implementation of this pedagogy along with non-availability of trained educators can make the execution of SEL difficult. Similarly, unable to balance one's own sentiment may drastically affect the surrounding factors of a student. As, emotional aspects can either enhance or slow down the performance of a student in their studies, their level of dedication, ethical instincts and therefore goes on to leave a huge impact upon their overall career (Rime-Kaufman and Hulleman,2015, p.151-166; Haymovitz et al.,2017, p.8). At this juncture, if one tries to find out the impediments which might obstruct the path of this method to work with its full potentiality, then, one might come across some of factors. The success of SEL depends on the amount of advancement that particular place offers, economical condition existing at that place and also it might get biasedly divided at times amongst the two genders. Another trouble with this system is that there exist no proper ways through which the acquired expertise could be measured. Thus, as a suggestive way, theory-driven research is required that would enable analysis of the different learned expertise (Durlak et al., 2011, p.419).

At this juncture it becomes important to mention that being spiritually conscious can unravel most of the problem which has been raised in the SEL model. As discussed in the above section, Vivekananda has always supported the view of adding the spiritual elements in the educational structure. We will be elucidating about the spiritual element which could included in the curriculum of the educational institutions in the next section. As we have discussed that in SEL model the behavior of the different educators affects the student's personality each time in a different manner. This similar content was expressed by Vivekananda. He had said that educator are responsible for training the students to choose the moral or correct element. They also should teach them about the ways to avoid the negative involvements which can have adverse impact on their lives. As per Vivekananda, it becomes important on the part of the educator to maintain his own balance by living a life of contentment. However, this won't be possible if the educator sees his profession as source of money and if his greed continues to persist. Building a realistic view towards every aspect of life is necessary as change is constantly taking place around us, therefore, in order to keep up a pace with the things learnt from various sources and also applying them for solving the day to day complications, it is a necessary step to implement the acquired knowledge in a true sense (Shuddhidananda, 2020, p.52). Apart from this, one of the prime factors which are essential for the educator to have is the selfless attitude while teaching the pupils. His work of serving the students by educating them must not get biased with the greed to acquire wealth and popularity. He must work 'out of pure love for mankind at large' (Shuddhidananda, 2020, p.54). Vivekananda always emphasized the ideology of 'self-education' (Roy, 2021, p.72) as one of the most desirable option to educate the young minds.

5. Natural Learning

It becomes necessary to understand what Vivekananda has emphasized by allowing a child to discover his own expertise in a natural way. The journey towards the process of self-discovery is depended to a large extend on the educator or the guide, who is responsible for teaching him the steps he should follow even if exploration is involved. As imitating behavior is one of the common features amongst the young ones, therefore, it becomes important for the teacher to be there as a constant source of support. Also, the concept *Bhakti* Yoga (the path of devotion towards God) and *Jnana* Yoga (the path of knowledge) has been found to hold connection between controlling the wandering mind of a child and gradually making advancement for attaining the goal. Therefore, these two factors can also play an important role in grooming the inner faculties of the child and enabling their natural growth . Here, on one side, where it teaches the child that God can be reached by practicing utmost dedication and concentration. On the other side, it enables him to learn as to how he would become a disciplined personality in future when he develops the ability to find peace for oneself even in the midst of chaos. However, Vivekananda had propagated the idea of 'self-education or auto education'

(Roy, 2015, p.73). This goes on to mean that the students gradually acquire their lessons and there is no requirement for any external agent, be it the educator or the guardian, who would moderate their course of development. Here, in this perspective, he has also went on to mention that practicing of meditation, which is also a form *Bhakti Yoga*, as one of the most effective way through which a child can learn his lessons in the most effective manner. As per him, 'the more power of concentration, the greater amount of knowledge'. Failing to do so, may result in exhaustion of one's abilities (Roy, 2015, p.73).

6. Emotional Augmentation

Vivekananda has also accentuated the fact that "Violent attempts at reform always end by retarding reform... If you do not allow one to become a lion, he will become a fox" (Avinashilingam, 2019, p.17). Therefore, the continuity of wisdom should take place in a natural way. Excessive control over the student's conduct may retard his entire growth. What can be best done on the part of the educator is to "Loosen the soil a little, so that it may come out easily. Put a hedge round it; see that it is not killed by anything" (Avinashilingam, 2019, p.16). Later, one can provide all the required necessities to that same sapling for making its grip on the land surface firm and strong. Similarly, while teaching a young one, they should be provided with enough possibilities where they can explore things by themselves (Avinashilingam, 2019, p.16). When a child is taught about virtues in a strict and routine manner by his teacher then they immediately develop a tendency in them to drift apart from following those instructions or they might begin to lose their interest in listening to whatever is being told to them in the classroom. This happens as the teacher fails to feed their level of curiosity by providing instances which they would find relatable to them or to situations taking place around them. Thus, as per Vivekananda, the modernized trend of educational structure is centered around being 'career oriented' (Mohd, 2018, p. 20), thereby, in the process of making the students academically well-build, it goes on to undermine the importance of inculcating 'virtue, the disciplining of the mind, the strengthening of the moral will or formation of positive character' (Mohd, 2018, p.20). The process of learning would also be hampered if the educator fails in emphasizing the significance of avoiding conflicts and displaying anger and ill-feelings towards other people. And there seems to be no possibility for the children to acquire the life-skills which would enable them to 'minimize tension, remain calm in difficult situations, or how to turn the mind inward to experience supreme bliss' (Mohd, 2018, p.20). He has propagated the thought of allowing the children to grow up using their own space and time. The ability of assimilating the lessons taught by an educator becomes possible only when the child is taught not under any compulsion or strictness of learning and also not keeping them under the pressure of completing the task within a limited period of time (Roy, 2021, p.73). Providing the child with sufficient amount of space and time would enable them to evolve in a way, where they can explore a lot. At the same time, it would contribute in preparing their base stronger. Such

process helps a child not only to have a sound career, attain higher education but also makes them capable enough to decide for themselves the right option that they ought to adopt. Failing to do so becomes the reasons as to why there are increased incidences amongst the young children of self-harming or being inclined to move away to the path of making oneself indulged in malpractices (Mohd, 2018, p.21-22). Therefore, it becomes clear how active collaboration of the students in creative aspects not only allows a healthy mental growth in the process of learning new things but also serves to be a shelter in protecting them from getting swayed by deceptions and diversions. He had considered it to be the 'necessary faculty to understand and interpret the world as a forever changing reality' (Peters, 2022). To be imaginative allows an individual to indispensably 'search for meaning as part of a passionate engagement with the world that seeks to understand the evolving organic whole' (Peters, 2022). It proves that no matter from which discipline a person belongs or the profession he wants to pursue, one fact that remains unchanging is the end number of opportunities that the imaginative power in a person can provide them is beyond any limit. Sense of creativity is responsible for giving rise to 'aesthetics of education'. From the term 'aesthetics of education', it goes on to mean the positive transformation brought about in a 'student's 'field' of perception, which can be visual, auditory, sensory and perhaps may even include the touching of the student's soul' (Biesta, 2022, p.222). Vivekananda said, just like, 'The sun requires no torch to make him visible, we need not light a candle in order to see him' similarly, the dedication of a true educator to help his student, requires no separate explanation to justify how much devoted the educator is towards guiding and helping the pupil (Shuddhidananda, 2020, p.51).

Vivekananda had argued that the imaginative potentiality in each individual vary in their magnitude, therefore, it becomes very important to let a child make the choice for their profession in a very meticulous way. His main emphasis was on empowering the young minds and making them self-reliant. He has accentuated that the prime motive of educating anyone must be rested on one primary ideal and that is to enhance or groom the hidden talents lying within that person (Behera, 2018, p.788).

7. Conclusion

Swami Vivekananda can be accounted to be such a personality who had always laid his importance on the notion of 'character building'. He went on enlightening the young people to devote themselves for serving others. The present educational process 'ignores the polishing and development of the inner instrument of man, his mind and his life, It also avoids the innate divinity, the self within and focuses only on the body, mind and intellect', thereby, loses sight from all the important aspects of life, which is centered on developing immense optimism within oneself, which would outshine all negativities (Biswas, 2021, p.104). But, unfortunately, getting oneself clouded with pessimistic thoughts are gradually turning out be a part and parcel of society, as people hardly bother to pay attention to the development of creative faculties in the mind. Imaginative and creative skills cannot simply be grouped under the heading of simply possessing talent which is available to some specific few. This excuse is generally cited by most of the educators and parents for turning out the focus of the child forcibly towards academic achievements. But, every child should be taught from a much tender age the different life skills, be it gardening or singing, through which they can pacify their anxieties and thereby enjoy a happy time. It acts as a 'shock-absorber' when any individual comes across any uncertain or sad occurrences in their life. It enables them to accept the harsh realities and at the same time, not growing bitter by themselves. It thereby aids them in getting back to the normal flow of life.

References

- Avinashilingam, T. S. (2019). Education, Adhyaksha, Sri Ramakrishna Math, Mylapore, Chennai-4.
- Bahnson, A., Wilcox, J., Kruse, Jand Schou, T. (2020). From Surviving to Thriving. *The Science Teacher*, *87*(7),28-34.
- Behera, S.K. (2018). Role of Teacher In Swami Vivekananda's Man Making Education, International Journal of Research in Social Sciences, 8(3),786-795.
- Biesta, G. (2022). Have we been paying attention? Educational Anaesthetics in a Time of Crises, *Educational Philosophy and Theory*, 54 (3), 221–223.
- Biswas, H. K. (2021). Swami Vivekananda: As a Pathfinder of Modern India Student of department of education, *International Journal of Research Publication and Reviews*, 2(1), 102-105.
- Bliuc, A. M., Goodyear, P., and Ellis, R. A. (2007). Research Focus and Methodological Choices in Studies Into Students' Experiences of Blended Learning in Higher Education, *The Internet and Higher Education*, 10 (4):231-244.
- Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Weissberg, R. P and Schellinger, K. B. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child Development*, 82(1), 405-432.
- Elias, M. J., Zins, J. E., Weisserb, R. P., Frey, K. S., Greenberg, M. T., Haynes., Kessler, R., Stone, M.E.S., Shriver, T. P. (1997). Promoting Social and Emotional Learning: Guidelines for Educators. *Association for Supervision and Curriculum Development*. United States of America.
- Ellis, R. A., and Goodyear, P. (2016). Models of learning space: integrating research on space, place and learning in higher education, *Review of Education*, 4(2), 149-191.

- Ellis, R. A., and Goodyear, P. (2019). The Education Ecology of Universities: Integrating Learning, Strategy and the Academy. (1sted.) *Routledge*. New York.
- Hadwin, A., and Oshige, M. (2011). Self-Regulation, Coregulation, and Socially Shared Regulation: Exploring Perspectives of Social in Self-Regulated Learning Theory. *Teachers College Record*, 113(2), 240–264.
- Haymovitz, E., Allport, P., Lee, R., and Svistova, J. (2017). Exploring the Perceived Benefits and Limitations of a School-Based Social–Emotional Learning Program: A Concept Map Evaluation. *Children and Schools*, 40(1), 45-54.
- Laurillard, D. (2013). Foreword to the Second Edition. *Rethinking pedagogy for a digital age: Designing for 21st century learning*, 16-18. *Routledge*. New York.
- Madhavi, B. (2014). A Glance at Educational Philosophy in Indian Mythology and its Timelessness. International Journal of the Frontiers of English Literature and the Patterns of ELT, 2(1), 1-10.
- Mohd, W. (2018). Swami Vivekananda's Ideas and Philosophy of Education: A Way Out to Promote Imperishable Development of the Nation. *Indian Journal of Research*, 7(8), 20-24.
- Nathan, L. F. (2020). Joyful learning at scale . The Phi Delta Kappan. 101(8), 8-14.
- Oliveira, S., Roberto, M. S., Pereira, N. S., Alexandra, Pinto, A. Mand Simão, A. M. V. (2021). Impacts of Social and Emotional Learning Interventions for Teachers on Teachers' Outcomes: A Systematic Review with Meta-Analysis. *Educational Psychology*, 12, 1-19.
- Peters, M. A. (2022). 'Reality is an activity of the most august imagination'. When the world stops, it's not a complete disaster we can hear the birds sing! *Educational Philosophy and Theory*, 54 (3), 217–220.
- Reichl, K. A. S. (2017). Social and Emotional Learning and Teachers. *The Future of Children* , 27 (1), Social and Emotional Learning, 137-155.
- Rime-Kaufman, S. E., and Hulleman, C. S. (2015). SEL in elementary school settings: Identifying Mechanisms that Matter. In J.A.Durlak., C. E. Domitrovich., R. P. Weissberg., and T. P. Gullotta(eds.), Handbook of social and emotional learning: Research and practice,151–166. *Guilford Publications*. New York.
- Ranganadhananda, S. (1998). Eternal Values for changing society, *BharatiyaVidyaBhavan*, 1.159-160.
- Roy, D. R. (2021). Vivekananda's Educational Philosophy. International Research Journal of Modernization in Engineering Technology and Science, 3(2), 72-74.
- Roy, P. (2015). Vivekananda's Thought on Method of Teaching and Their Utility on Modern Area. *Indian Journal of Applied Research*, *5*(6), 482-483.

- Shuddhidananda, S. (2020). The Complete Works of Swami Vivekananda, *Volume 3.Advaita Ashrama*.Kolkata.
- Trees, A. R., and Jackson, M. H. (2007). The Learning environment in clicker classrooms: Student processes of learning and involvement in large university-level courses using student response systems. *Learning, Media and Technology*, 32(1), 21–40.
- Umadevi, S. (2015). Humanism in Indian Philosophy- In Indian Philosophy Contributions of Swami Vivekananda and Deendayal Upadhyaya- An Analysis ,The Indian Journal of Political Science, 76(3), 271-276.
- Walia, K. (2018). My Idea of Education; Swami Vivekananda; Advaita Ashrama. Kolkata.
- Wu, J.H., Tennyson, R. D., and Hsia, T. L. (2010). A Study of Student Satisfaction in a Blended e-learning System Environment, *Computers & Education*, 55(1):155-164.

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