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Project Based Learning: Extending Social and Educational Reach

Abstract: Project based learning approaches are being employed in the college as a creative and innovative means to engage and motivate learners through a transformative curriculum model for both further and higher education students. This article will examine how these pedagogical approaches have made a positive impact on our Childhood Studies' students with regards to retention, achievement and success set within the context of widening participation and social engagement with and for those in society who are the hardest to reach including those children from the travelling community who have been integral partners in our Erasmus project. It will highlight the benefits of social learning, not only as a means of developing vocational skills for our students, but it will also examine the wider impacts of developing softer skills for our students, particularly with regards to employability skills, whilst considering the wider impacts this approach has had on society and building community cohesion.

Keywords: social learning, project based learning, motivation, collaboration, employability skills, technology enhanced learning

Project Based Learning: Context and Rationale

The twenty first century student is living and learning in a world which by its very nature challenges us as educators to react and respond to how pedagogical approaches should be shaped and employed. Technology

enhanced learning as a response has meant that many educators have been driven to consider how 'they do things' which has been energising for some and demotivating for others. Innovation in assessment is an unavoidable necessity. As technological influences bombard and touch our students we too have a responsibility to reach out to our learners; otherwise the distance between us may become too great and ultimately impact on our connectedness. Dunn (2017: 18) acknowledges this and discusses the fact that the evolutionary next step is involving the students themselves as 'digital leaders and curators of knowledge' and the value of this collaborative approach will be examined later on in this paper. This further demonstrates how much we, as a college community, value the importance of positive internal and external working relationships to achieve shared goals and this very much underpins our core values of collaboration, ambition, respect and excellence. As a people oriented organisation the college has however experienced a seismic shift in technologically inspired learning over a number of years as we embrace a more blended learning model of curriculum delivery, which includes e portfolio, and a greater emphasis has been placed on increased functionality of virtual learning environments as well as considerable investment in staff attending international technological conferences such as the OEB Summit in Iceland and Berlin. This is in direct response to an acknowledgement that our students are growing up in a world where technology enhanced learning is expected as an intuitive response to their already established digital literacy. We have to be of course mindful of the fact that current research, as supported by a recent article published in the Irish Times (09/02/18), maintains that a blended approach to instruction has the best results for students academically as opposed to digitally overriding the curriculum or in other words encouraging a complete digitisation of pedagogy where interfacing with hardware and software being the only requirement in leading students to learning.

In the Early Years classroom a new generation of digitally literate children are being nurtured and our students will have a responsibility as educators to, like we as educators, respond to new platforms of innovation. However, although technology has an important role to play in preparing

our young people for life and work, there is a growing demand for our learners to be able to reach beyond the tablet to connect and interface with people on a human level which reflects the world of work; it is the synergy between online and offline modes of learning which is challenging us with regards to curriculum development and review. Keengwe and Onchwari (2009) underscore this where they refer to employing a constructivist approach to technology use in the Early Years whereby technology is integrated into the curriculum as opposed to shaping the curriculum around the technology which has the potential to return a more superficial result. This active and collaborative approach through social learning is an interesting concept as we often assume that the use of technology is a solitary and isolating pursuit. However, there is a common belief or perception amongst many Early Years educators and teaching staff that many of our college students are 'zoning out' as opposed to 'zoning in' as the temptation of interfacing virtually can override the need for human physical contact. This should not be altogether surprising as we consider how as a world we are communicating with each other as new technologies limit the requirement to have face to face contact with other human beings. It is this intuitively evolving digital literacy which we must respond to otherwise a traditional teaching model will become as foreign to a student as a digital model would be for those who are self-confessed digitally illiterate. However, this may understandably raise concerns with regards to what impact this may have on students working collaboratively as part of a multi-disciplinary team with young children and staff in the Early Years sector unless technology is being used in a more collaborative manner. This profession still requires humans to manage and relate to other humans; in fact managing people, whether children or adults, is a key skill in relation to working in the Early Years; an algorithm will not solve this problem. This issue has been raised on multiple occasions where placement supervisors inform college tutors that students do not often readily have the communication skills necessary to carry out the role. A widely read article published in *The Independent* (16/08/15) supports this view and was very critical of the role of higher education institutions in that they were presented as being more concerned with grades and

academic ability as opposed to nurturing rounded individuals who are work ready. It could be argued though that none of us have these skills 'ready-made' but the article suggests that the situation is deteriorating and technology could be suggested as playing a part in this. In certain disciplines lone and sole working may be the norm but these are in the minority and what we do not want is for students to have their first experience of problem solving, conflict resolution or teamwork as they assume their role working in the Early Years as ironically many of these potentially under developed skills could be what is driving their day to day working. In training our students there is a dichotomy between providing them with the vocational skills and knowledge appropriate to the field of study while considering and appreciating that many do not have the relevant communication skills necessary to operate in a world where people still need people to achieve their common goals. This is not about apportioning blame but about balance and adjustment. The college has been piloting several additionality or enhancement accredited qualifications for full time students in addition to their main programme of study to assist with providing students with the skills for functioning in the workplace. Some of these have included Skills for the Workplace, Team working Skills and Presentation Skills. Often it these students who have a strong academic profile who need the most support in this area as they have not entered on to a prior vocational pathway and gained this work readiness experience over a number of years. Project Based Learning approaches have been employed as a vehicle to drive this curriculum also.

Play and Learning in Higher Education

In the Early Years we are mindful that motivation and learning are born out of discovery and exploration where children are encouraged to play together, however as we grow older we can sometimes become less playful and more introverted. This conjures thoughts of when George Bernard Shaw famously penned, 'We don't stop playing because we grow old; we grow old because we stop playing' (Anderson, 2018).

Some may argue that technology is facilitating this while stealing the necessity to build relationships with others therefore a more playful approach to learning will encourage that reconnection with us as educators while modelling best practice in the Early Years thus generating a culture of learning reflecting a 'play within a play'. A recent article in The Telegraph (23/12/15) suggests that children in recent times are more proficient at using a tablet or electronic device as opposed to traditional childhood goals of riding a bike, tying a shoelace or swimming unaided. However there are many other benefits that technology can bring and again the issue of balance comes into focus.

This playful approach to learning can be achieved through project based learning while integrating technological influences with the primary aim being that students' levels of motivation are kept high as students remain interested and engaged with the task in hand. This categorically does not detract from the importance and necessity for academic discovery and theoretical research but considers the possibilities of maximising outcomes for students while integrating theory and practice within the parameters of an educational institution to achieve shared goals. Our Early Years Higher Education students in the college are traditionally assessed through observation of placement practice while completing written essays, assignments and presentations. We often refer to this as the 'know how' and 'show how' with both having equal relevance and importance. As part of an evolution of assessment I would imagine that the majority of these assessment strategies will remain constant however there is potential to reshape and reconsider how we assess learners in a much more practical and relatable way where theory and practice can meet within the same environment as opposed to the current on site and off site model of delivery where there is potential for theory to be theory and practice to be practice and neither the two shall meet.

Project Based Learning is not a new phenomenon so before we explore the benefits and challenges it is important to define what it is, set within the context of this Erasmus project. Belfast Metropolitan College's wider Project Based Learning Framework (2017) characterises this approach as about active and engaged learning which aims to motivate

learners, increase their ability to apply what they have learned, and aid them to obtain a deeper knowledge and understanding of the applications of their skills (Heggarty, 2017). Essentially Project Based Learning reflects a socially constructivist approach to learning which underpins the thinking of Dewey and Piaget with reference to constructing knowledge through hands on interaction. This is not to be confused with group learning, according to Race (2000), where collaborative learning is used as a tool to motivate and engage learners as a pedagogical goal. Whilst this is a very palpable undercurrent running through the Project Based Learning methodology, a key product of assessment may not necessarily be available where the process and social benefits are deemed to be the primary goal. A Project Based Learning approach has these core skills embedded iteratively throughout the journey. Largen, Mergendoller and Boss underscore this by highlighting the importance of setting clear aims and objectives, formulating a challenging question or problem, carrying out the task through sustained inquiry and critiquing and reflecting on the result (Larmer, 2015). All of these aspects have been integrated into our assessment for learning strategy for our Higher Education students which sits very comfortably alongside more traditional means of assessment discussed earlier. It would be foolish to expect a paradigm shift in practice as there are many combating variables, including established culture, attitude and belief, but over the past number of years there has been a greater engagement at all levels with what Miller and Pound (2011: 104) refer to as 'active participatory learning'. This has been increasingly cemented in the culture of learning in the department by both positive student and staff feedback as well as consistently positive external quality assurance reports. There is undoubtedly an argument which could potentially erode the authenticity of this approach which states that more traditional methods of assessments facilitate the capturing of evidence in a more straightforward manner however for our Early Years students there is an interesting link between this project based learning approach for their own studies but also how children learn through play in the early years while forging deeper community cohesion. This has been accentuated through our partnerships with St Ursula's College, Dusseldorf and St Mary's Primary School, Belfast.

Extending Our Reach: The Impacts

Our very special relationship with our partner organisations began several years ago with many meetings and exchange visits to discuss what we could achieve together. This philosophy is very much at the heart of Northern Ireland's regional Further Education Means Success (2016: 17) document where it states:

'Colleges will strengthen their partnership working with a range of other organisations in the public, private and voluntary and community sectors in order to improve the services delivered to employers and individuals.'

As we were teasing out the key aims and objectives, a fundraising opportunity presented itself where the Childhood Studies students at Belfast Metropolitan College worked collaboratively with St Mary's Primary School to raise money for the chosen BBC charity 'Children In Need'. This was hugely successful and student feedback was extremely positive. This started our Project Based Learning journey in earnest and our higher education students and staff were tasked with developing a project where they could capture evidence in an innovative way which still maintained the integrity of the qualification. This was a challenging endeavour but proved to be an empowering one as staff and students worked collaboratively to jointly construct an aspect of their curriculum. This was an interesting approach as students became co constructors in their learning which paved the way for a new approach to teaching, learning and curriculum design. This echoes the thinking of Broadhead (2006) cited in Sproule and Walsh (2017) who, when referring to children in the Early Years, discussed the non-convergent viewpoint that assessment of children should be accomplished with the child as opposed to be on the child. Contextually this may seem irrelevant given the fact that the college students are so much older than our children in the Early Years however why should this approach be none the less relevant?; the same principles, even if only to mirror the optimal practice in the field they will work, will return a positive result; these positive learning dispositions demonstrate that the students are indeed extending their reach further

than they perhaps realise and the challenge is not in the experiencing but in the evaluating. Mc Millan (2017) also underscores the importance of a determined and intentional socially constructivist approach through co creation of play, exploration and planning in the Early Years; in effect these are key cornerstones of skills for life which can sometimes be overshadowed and overpowered by more academic goals as students progress through their course of study; the challenge is keeping what was most agreed, relevant and planned for still agreed, relevant and planned for otherwise we lose focus of what we really want our students to be and continues the conversation about the value of occupational competence which incorporates a very strong social and personal dimension where academic prowess is deemed to be not wholly enough. At the heart of a socially constructivist approach it is important to reflect upon what happens in society in order to contextualise the learning. It could be argued that Piaget and Vygotsky were more concerned with the process over product but in this model of project based learning the product and process are given equal value; the journey and journey's end are taken into consideration owing to the complex nature of multiple goals. The given context of St Mary's Primary School is also a unique one given that the majority of the children are members of the travelling community which incorporates a very unique social perspective; one which the majority of students will not have experienced until now thus allowing them to extend their reach with regards to knowledge, approach and experience.

As a result of this deeper collaboration between staff and students a project was devised, working with St Mary's Primary School, which centred around language and literacy which is a primary component of the degree students Promoting Language in the Early Years module in Semester Two. As part of the assessment the students traditionally have been tasked with presenting and evaluating a story sack to their peers but under the new project based learning delivery model the students planned, produced and presented their story sacks as part of a themed World Book Day event to a class of learners from St Mary's primary school in the college lecture theatre. This meant that the students had to negotiate the use of this space with the estates team, consider how the space

would be set up, reflect on what snacks would be provided for the children, consider health and safety arrangements which very much supported the development of those softer skills mentioned earlier in this paper. This was truly holistic learning following an anti-compartmentalised but integrated approach. Miller (2006) refers to this in the Early Years as 'organic, emergent, experimental and based on cooperation'. It is noteworthy that regardless of a student's academic ability, hands on vocational competency is something which the learner still needs to achieve beyond the pages of a textbook and this approach has given learners an opportunity to 'flip the classroom', not in a technological sense, but against the backdrop of a staged and simulated learning environment which they have co developed as a group bringing together all of their experiences from practice. An unavoidable observation however is that this synergy and progress has been achieved through non technological collaboration and it really cements the notion of the importance of embracing a blended approach to learning with a range of teaching strategies incorporating collaborative practice. In my view using technology for this simulated activity would not have enhanced the learning and in fact it may have detracted from the learning as it allowed students, staff and children to focus on developing their communication and observational skills. This approach also allowed for college staff to assess their students within the parameters of the college as opposed to the traditional environment of a school which generated a unique yet valid learning opportunity. The benefits also heavily impacted on the children and wider school community in that the school staff were able to sit back and observe the children with our students which gave them a unique opportunity for reflection with all staff expressing delight in what they had learned about their children's learning in a very different and unexpected context. Feedback from the school staff also illustrated that they were inspired by our approaches to learning and would take this back to the school context. There was much discussion surrounding how the formal classroom environment can often inhibit creativity and the staff felt that the informal nature of the delivery of the session lend itself to learning as this session was delivered in an open space with picnic rugs and cushions

very much reflecting the Reggio Emilia philosophy. This was extremely empowering for the students and it had the unexpected outcome of them hearing about how inspiring they were by other qualified teaching staff. This formed very much part of the student's evaluations which were richer and more evidence based as they had lived and breathed the project from inception to completion. Student feedback on the event was unanimously in favour of this approach to learning as they believed it was more engaging and purposeful. They clearly enjoyed developing the project which met their assessment goals while allowing them to work with their peers and the children from the primary school. Much of the Erasmus project focuses on the importance of extending reach and social commitment. Projects such as this have also made way for greater community cohesion as St Mary's uniqueness as a school which welcomes many different minorities which is something that it shares in common with the college. Northern Ireland still remains a very divided society as a result of legacy issues associated with the conflict which ended in 1998 therefore reaching out in this manner has broadened the students scope while enhancing the children's experiences. Many of our students live and will have placements in schools which will be close to where they live; it may have been the case that this experience for them would be the first opportunity they would have had to work with children from a different culture or religion. This is a necessary component of creating and engendering a normalised and shared future for Northern Ireland so in this respect this project has extending its reach in a different direction to support and encourage learners to promote mutual understanding, respect and tolerance.

These multi-faceted benefits have been supported also by the external examiner whose revalidation report in 2016 suggested more innovation in assessment where group assessments were muted as a possible action for improvement. I feel that this approach indeed goes further in that regard in terms of providing a greater holistically beneficially experience, which has an academic thread throughout, but at the same time experientially supporting our learners through collective engagement in developing key employability skills needed for the workplace. This

cannot wholly replace a purist notion of higher education as many teaching and learning approaches should be employed which is supported by Howard Gardner's theory of multiple intelligences but it is merely another student centred adaptation or evolution of an already muted method of assessment; a resurgence of evidence gathering (Gardner, 2010).

In terms of student retention there has been an 8% increase in the number of students remaining on the degree programme between 2016/2017 and 2017/2018. It would be short sighted of me to suggest that this is entirely as a result of a project based learning delivery model but it has definitely enhanced student engagement and has been successful for the students on a personal level with reference to building confidence and self-esteem which potentially has been eroded as a result of technological influences. This conjures up thoughts of Walsh et al. (2006) in their study of quality indicators where they refer to aspects such as motivation, concentration, independence, social interaction and respect. These behaviours are not isolated to the Early Years however they are behaviours which can be quick to dissolve as they are the very traits and characteristics of best practice that often we struggle to find in our students. Therefore we have a duty to re-establish for our learners what has been lost in a gentle and supportive way of modelling best practice which should in turn support learners as they continue to build up their experience of working in the Early Years which very much underpins the importance of developing the 'whole' student.

Summary and Key Findings

Journeying has been at the centre of this approach to project based learning. The planned journey has been complimented by many different unplanned experiences which have been mutually beneficial for staff and students at Belfast Metropolitan College as well as other key community stakeholders both locally and internationally. At a student level the benefits have far outweighed the challenges and although staff and students cited that more effort was required in setting up the project,

as opposed to following more traditional methods, the assessment process was made much more meaningful which was supported by a hands on vocationally relevant experience designed by and implemented by the students. Some staff initially were cynical as to the impacts this approach would have but as a result of observing and experiencing further projects the idea of project based learning as a valid and reliable assessment tool is becoming much more attractive; this has generated a cultural shift in the department towards experimentation of curriculum delivery and the department is now taking an evolutionary step towards blending a project based learning approach with virtual learning environments with the view and purpose of responding to the needs of our modern day student.

References

Books

- Boss S., Krauss, J. (2007). *Reinventing project-based learning: Your field guide to real-world projects in the digital age*. Eugene, OR: International Society for Technology in Education.
- Dewey, J. (1938/1997). *Education and Experience*. New York: Touchstone.
- Greeno, J.G. (2006). *Learning in activity*. In R.K. Sawyer (Ed.) *The Cambridge handbook of the learning sciences* (pp. 79–96). New York: Cambridge University Press.
- Keengwe, F., Onchwari, G. (2009). *Technology and Early Childhood Education: A Technology Integration Professional Development Model for Practicing Teachers*. Springer Science+Business Media, LLC 2009. Published online: 3 September 2009.
- Miller, L. Pound, P. (2011). *Theories and Approaches to Learning in the Early Years*. London: Sage.
- Race, P. (2000). *500 Tips on Group Learning*. London: Kogan Page Ltd.
- Walsh, G., McMillan, D., McGuinness, C. (2017). *Playful Teaching and Learning*. London: Sage.

Journals

- Blumenfeld P.C., Soloway, E., Marx, R.W., Krajcik, J.S., Guzdial, M., Palincsar, A. (1991). Motivating Project-Based Learning: Sustaining the Doing, Supporting the Learning. *Educational Psychologist*, 26 (3–4), 369–398.
- Dunn, L. (2017). Embrace the technology: digital learning and teaching is the responsibility for all. *Teaching Scotland*, 67, 18–19.
- Mitchell, S., Foulger, T.S., Wetzal, K., Rathkey, C. (2009). The negotiated project approach: Project-based learning without leaving the standards behind. *Early Childhood Education Journal*, 36 (4), 339–346.
- Walsh, G., Spoule, L., McGuinness, C., Trew, K., Rafferty, H., Sheehy, N. (2006). An Appropriate Curriculum for the 4–5 year old child in Northern Ireland: Comparing Play Based Approaches, *Early Years: An International Journal of Research and Development*, 26 (2), 201–201.

Online Sources

- Anderson, A.R. (n.d.). *We don't stop playing because we grow old; we grow old because we stop playing*. Retrieved July 25, 2018, from <http://www.amyreesander.com/blog/we-dontstop-playing-because-we-grow-old-we-grow-old-because-we-stopplaying/#.W1lu8o0zUcA>.
- Buck Institute for Education. (2003). *Project Based Learning Handbook: A Guide to Standards-Focused Project Based Learning for Middle and High School Teachers*. Retrieved from <http://www.bie.org/tools/handbook>.
- Further Education Means Success: The Northern Ireland Strategy for Further Education*. (2016). Retrieved from <https://www.economy-ni.gov.uk/sites/default/files/publications/economy/FE-Strategy%20FE-Means-success.pdf>.
- Gardner, H. (2010). *Multiple intelligences*. Retrieved from <http://www.howardgardner.com/MI/mi.html>.
- Larmer, G. (2015). *Gold Standard PBL: Essential Project Design Elements*. Retrieved from http://www.bie.org/blog/gold_standard_pbl_essential_project_design_elements.
- Miller, R. (2006). *Educating the Child's "Inner Power"*. Retrieved from http://www.pathsoflearning.net/articles_Educating_Childs_Inner_Power.php.
- <https://www.irishtimes.com/news/education/technology-can-hurt-students-learning-research-shows-1.3385864> (Retrieved 07/07/18).
- <https://www.independent.co.uk/student/news/students-lack-the-skills-and-discipline-essential-in-a-workplace-warns-boss-10457428.html> (Retrieved 02/7/18).
- https://www.niu.edu/facdev/_pdf/guide/learning/howard_gardner_theory_multiple_intelligences.pdf (Retrieved 25/07/18).
- https://tccl.arcc.albany.edu/knilt/images/4/4d/PBL_Article.pdf (Retrieved 15/07/18).
- <https://www.telegraph.co.uk/technology/news/10529785/How-technology-is-changing-childhood.html> (Retrieved 22/07/18).

Other sources

- Heggarty, J. (2017). Belfast Metropolitan College. Project Based Learning Framework.