Shaping the Curriculum: A Characteristics Approach and its Impact on Teaching and Learning

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Abstract: This is a critical review on the characteristics approach used in shaping the curriculum and its impact on teaching and learning. It analyzes 10 journals/book articles base on five characteristics of the curriculum. The terms discussed are research intensiveness, interdisciplinary, community engagement, global connectedness and academic literacy. These characteristics are compared and contrast with relevant information highlighting its impact on teaching and learning. It also further discusses the issues of concern regarding the processes on the delivery systems in learning organisations such as schools and higher learning institutions.

Key words: Curriculum approach, characteristics, teaching, learning, curriculum issues

INTRODUCTION

The goal of the 21st century curriculum is to develop a modern, world-class curriculum that inspires and challenges all learners and prepares them for the future According to Eyre (2016) system debate around knowledge versus the use and application of knowledge sets a challenge for policy makers. She stresses that a skill based curricula is optimal for building the learner capabilities of individuals while subject based curricula sequence the acquisition of cognitive knowledge and skills. Presently in Malaysia to this end, the national curriculum aims to create Malaysian students that are balanced, resilient, inquisitive, principled, informed, caring, patriotic as well as an effective thinker, communicator and team player (Malaysian Blueprint in 2013-2025, EPU Millenneum development goalsin 2030). In shaping the curriculum there are five terms that are registered in shaping them, research intensiveness, interdisciplinarity, community engagement, global connectedness and academic literacy (Blackmore and Kandiko, 2012).

However, it is doubtful if these characteristics are actually reflected in the curriculum. This report aim to critically review 10 articles/books and relate the characteristics mentioned with teaching, learning and ways of assessment (if any) and the issues and challenges involved in trying to make it successful. This review also take an approach form Hussin *et al.* (2015), on how knowledge is disseminated through reflective thinking and reflective writing, Hussin *et al.* (2015).

CURRICULUM SHAPING AND ITS BENEFITS?

According to Craig and Bielenberg (2015), curriculum is a cultural reproduction in a structured way. It should also value independent thinking in the context of the widest sense of social responsibility. Lattuca and Stark (2011), in their book shaping the college curriculum emphasized that it promotes clarity about influences on the curriculum. Meaningful planning is important to create awareness in the educational environment.

The five characteristics of curriculum reshaping: Research is a systematic enquiry which is reported in a form which allows the research methods and the outcomes to be accessible to others (Allison *et al.*, 2016). Humes (2013) cited inter disciplinarily as multi-context learning which is seen as one of a number of activities that 'promote and exercise higher-order skills' Global education is a widely acknowledged educational approach that "promotes open-mindeness leading to new thinking about the world and a predisposition to take action for change" (Bista and Saleh, 2014). Dolby and Rahman (2008) described international education as "an umbrella" that covers the internationalization of higher education, the expansion of international schools and the globalization of education.

The impacts in teaching and learning: Craig and Bielenberg (2015) study of engineering students in united state highlighted and documented gains across

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several relevant learning outcomes related to research, thinking and teamwork skills, all desired competencies for participation in a knowledge based society in research. The second journal is a case study by Salam *et el.* (2015) of a mandatory research module, implemented in Universiti Kebangsaan Malaysia (UKM).

The method undertaken was a retrospective study done on SSM research projects at UKM. The findings found that mandatory undergraduate student research project brings an opportunity to develop students' capacity building from conception to final report writing and thereby narrowing the gap between education and practice. The difference between both this study is the first one is project base while the second one is inquiry base approach. Salam *et al.* (2015) identified that students who publish during their studies are more able to publish after they graduate. Next, mandatory undergraduate student research project brings an opportunity to develop students' capacity building from conception to final report writing and finally it is hoped that students will be more innovative and be able to conduct excellent scientific research work in future as a medical graduate. A notable findings of Craig and Bielenberg (2015) research in the learning sciences, related to a need to rethink learning environments is that students and young adults in particular, learn best when working together, sharing their learning and building on knowledge and understanding. The study identified that fellow colleagues and lecturers as well as exchange of innovative ideas and knowledge explored through research and this does create an impact on the teaching. In the discussion of assessment both study used rubrics.

The first study, by Salam *et al.* (2015) students assessment are done after every sub module using a scoring rubric. Whilst the second study, base on united states engineering students team were assessed through recommended report and oral presentation. Both study have confirmed that incorporating research intensiveness produce positive results. Two study have been chosen to discuss interdisciplinary. The sections that follow focus on four issues that are critical for the coherence and success of attempts to promote interdisciplinary work: the way in which interdisciplinary is conceptualised; ensuring that cross-curricular connections are convincing and intellectually challenging; devising pedagogic strategies that are effective and addressing operational obstacles to inter disciplinary work.

The second study is by Sarjit Kaur and Manan (2013) attempts to develop interdisciplinary teaching in a language and literature course reports on types of learning and assessment activities that students experienced in enhancing their knowledge-making

process. The development of interdisciplinary content was made possible and students reported having positive learning experiences and enjoyed being active and engaged in the critical discourses during class. The first study is base on integrating. Interdisciplinary in Scotland education while another incorporating interdisciplinary in the Linguistics and English Language Studies in Malaysia by Kaur and Manan (2013) who highlighted that one of the impact of learning when incorporating interdisciplinary teaching is that it form collaborative learning which will help students in the process of Conscientisation, appreciate and respect one another's differing cultural and ideological perspectives.

In Humes (2013) study he found that interdisciplinary encourages learners to be flexible and creative and acquire skills that would make them more independent in their learning, it has transferable skills that can be applied across different areas of knowledge which is attach to collaboration and teamwork. The first study which discusses community engagement is on Malaysian Higher Education by Zakariya (2014) and the second is Enhancing Community-University Engagement, a Latin America case by Gregorutti *et al.* (2015). Zakariya (2014) which examines the state of community engagement in Malaysian higher education institutions. Community engagement in the study refers to the collaboration between higher education institutions and their larger communities (local, regional/state,national, global) (Driscoll, 2009). The reachers identified that which community engagement is still an emerging trend in Higher Education Institutions in Malaysia. Most activities which involve relations with societies were not well-coordinated and structured and occurred not as the direct and conscious policy of the higher education institutions.

The second study is a case study enhancing university engagement in community in higher education. It focuses on the case of the Center Luzy Vida (Light and Life) at a university in which students, faculty members and community members participate in planning, implementing and evaluating community health projects. There were changes base on leaders, community perceptions, academic structures, teaching, extra skills and students itself. which this was noted by Zakaria (2014) the program by UKM had made the interaction with communities facilitate the development of new skill in the students which and it facilitated student collaboration and gained momentum fueled by successful data rich, short-term community interventions.

As what which Eyre (2016) highlighted that students performance should be accessed to a diverse, interesting and demanding set of learning opportunities that enable

students to sharpen these skills (Eyre, 2016). Bista and Saleh (2014) studies for global education programs in the united states found there were no significant statistical differences between the perceptions of graduate students and alumni or between those of international and American students in regards to the importance and benefits of global education.

Dolby and Rahman (2008) described international education as "an umbrella" that covers the internationalization of higher education therefore Yusof's study is a concept study about the present situation of internationalization of higher education in Malaysian Public Institution. Bista and Saleh's (2014) study has stated that the impact on teachers is that all educators need to understand social and political issues that shape the world. It was highlighted in his study that some international students felt that the competency of English language by some lecturers may not up to the expectation. The educators need to be prepared and have the proper skills and ability to conduct a classroom. It was identified that global education makes students more sensitive and respectful of differences. Learning themes introduced has also developed interdependence and globalization, identity and cultural diversity, social justice and human rights, peace building and conflict resolutions and sustainable futures (Bista and Saleh, 2014).

While Yusof highlighted that international students having difficulty in the application of lesson as they discovered that most of this students adopt learning style of their home country where memorizing was key to their learning which further creates discipline problem related to plagiarism. The practice of embedding literacy interventions within subject study is time-consuming and often logistically challenging therefore in order to help learning advisors, their managers and academic staff in faculties to consider the issues, options and constraints in a systematic manner their study proposes a best-practice model drawing from over two decades of literature and the reacher' practical experience over the same period in New Zealand and overseas (McWilliams and Allan, 2014).

The second article (Nambiar and Ibrahim, 2013) explores the academic literacy among Chinese undergraduates. The findings suggest while these students think they are prepared to assimilate into the new environment they encounter difficulties and have to negotiate their literacy practices within those of the host country. The impact of learning between two study gives an opposite scenario as one feels that academic literacy promotes self development while another feels that self development become a problem to develop. Nambiar and Ibrahim (2013) stated that teachers should help these

students adjust to their new environment by adapting better inclusive classroom practices.

ISSUES AND CHALLENGES IN SHAPING THE CURRICULUM

Salam *et al.* (2015) identified that inadequate supervision as the main barriers research intensiveness. Other causes include lack of time, neglect of routine studies and deterioration of the clinical skill due to more time being spent on research activities and inadequate project management. Availability of adequate fund is also a barrier particularly in the developing countries. Lack of interest and inadequate knowledge in research activities or lack of good research proposals are also the common barrier for the developing countries. Whilst, Craig and Bielenberg (2015) identified that students continued to struggle to synthesize and use the information to support design decisions throughout.

Humes (2015) highlighted that some of the topics suggested by advocates of inter-disciplinary or integrationist approaches to the curriculum (e.g., freedom, culture, community) are so general as to provide little guidance and coherence. Kaur and Manan (2013) have similar views with the issue arising from curriculum which is that the process of creating an interdisciplinary team-taught curriculum is always challenging and teams can dissolve and whole courses can lose momentum when some things change. Humes (2015) highlighted that effective collaboration may require input from people other than teachers and agencies other than educational establishments.

However, the case study by Kaur and Manan (2013) states students' reported having positive learning experiences and enjoyed being active and engaged in the critical discourses during class. More importantly, they also learn to appreciate and respect one another's differing cultural and ideological perspectives (Kaur and Manan, 2013). Zakaria (2014) in his study felt that most activities which involve relations with societies were not well-coordinated and structured and occurred not as the direct and conscious policy of the higher learning institutions. There is still the lacking of community service and community based participatory projects.

A barrier mentioned by Blackmore and Kandiko (2012) in global connectedness is lack of understanding similar to Yusof's findings showed that international students faced great challenges in adjusting their life in Malaysia, including different teaching and learning style, culture, language, loneliness and social distancing among others. The university academics and administrators similarly faced unfamiliar international students' characteristics

and needs. Yusof stated in his study that there is lacking in the proficiency of English of the international students which will definitely impede their learning. Nambiar and Ibrahim (2013) identified that when faced with the challenges of group work and discussions they chose to work with other students from China and have their discussions in Mandarin and not English in academic literacy (Nambiar and Ibrahim, 2013).

CONCLUSION

Present discussion found that curriculum characteristics are central to contemporary conceptions of curricula in research-intensive institutions, reaching to the heart of what a higher education is considered to be current concerns according to Blackmore and Kandiko (2012) is to be more definite about the meanings of the terms and more active in ensuring that they are developed and assessed produces a range of challenges. Dealing in class with real-world problems, encouraging open-ended class discussions and fostering inquiry-oriented experiments, there is a good chance for a consequent development of critical thinking capabilities. Student's strengths in one subject area will support new learning in study (Miri *et al.*, 2007).

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