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**Research Article** 

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## **Factors to Designing An Innovative Curriculum For Unique Teaching Approaches.**

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#### **Keywords**

Cognitive Development, Curriculum Development, Education, Innovative Way, Learning Objectives, Teaching Approaches, Teaching Strategies.

#### Abstract

The purpose of this paper is to highlight the factors to designing an innovative curriculum for unique teaching approaches. This study will deal with two aspects of providing the factors to designing an innovative curriculum with guidance about encouraging more creative thinking in their classrooms. Curriculum development basically deals with the teaching-learning process for the prescribed course of studies. It involves selecting and organizing the required content along with planning the method of teaching it. In this paper, the nature and function of curriculum development is studied with regards to its impact and outcome. The importance of formulating skill oriented curriculum for adapting to the changing scenario and growing competition is analysed.

#### Introduction

There is a trend in curriculum policy in India and elsewhere to recognize the importance of the teacher community, ie their active contribution to shaping their work and its conditions for the overall quality of education. In every era, the government raises education policies as part of the development of human potential. Due to the dizzving speed of technological development in recent years, new roles have emerged in sectors such as industry, society, government and education. The teacher had to become an agent of change and transform his knowledge, skills and competences. The role of teaching changes internally when influenced by external changes be a Global Citizen is an eight-week online program developed by the organization Beyond Education based on the Center for Curriculum Redesign (CCR) four-dimensional model of education (Fadel, 2021) and focuses on five core 21stcentury competencies: critical thinking, communication, collaboration, curiosity and ethics: through individual and collective activities.

The curriculum should be composed of goals and experiences with relatively traditional content divisions, but all based on the health needs of society, the philosophy of scientific thinking and the professional characteristics of doctors. In 1972 (Simpson, 1972) the advice was to define goals in behavioral terms (perhaps not so different from today's concern with competences) and also that curricula should provide what the student and community need, not what is comfortable. Teachers were advised to try to integrate their teaching more effectively and to allow students some freedom of choice in what they learn. 1982 (Cox et al., 1982) and 1983 (Newble et al., 1983) advocated a systemic approach to educational design, with an emphasis on teaching methods aimed at achieving learning outcomes, in the belief that active student participation in learning is likely to be effective is strategy.

In all teaching exams, teachers design and conduct lab activities to encourage students to monitor their progress and provide feedback (Das, 2019). Online educational approaches help and encourage classroom practices, but there is an urgent need to weigh the pros and cons of technology and harness its power (Das & Das, 2020). Professionalism and professional development are different characteristics of a profession, although they are linked. The advancement of science and technology in modern times has raised all professions to their highest level. In our study, we focus on making clear the concept of teacher professionalism and professional development and the factors that influence their validation through educational policies (Chand and Das, 2022).

Curriculum is concerned with planning the student experience. learning process and Curriculum development is responsible for assessing learning objectives and outcomes. It is designed for learners and should therefore have a learner-centric rather than an organization-centric approach. Designing the curriculum along the organization's vision and mission gives it an identity; However, this must not contradict the interests of the students, otherwise it is an unproductive curriculum. It is also mandatory that the curriculum is regularly reviewed to maintain its effectiveness in relation to the changing needs of society as a whole. All of these factors lead to the need for innovation in curriculum development. Only when the curriculum is innovative can it meet the rapidly changing needs of the education sector and bring productive benefits to society.

This study of the curriculum shows us that basic ideas are developed in accordance with economic and social imperatives but remain rooted in prior thinking. Many "current" ideas are not new; they also often lack supporting evidence, for example:

- ) A focus on student learning rather than teacher teaching
- ) The need for teachers to learn how to do their job well
- ) An instrumental focus on outcomes (expressed as goals or competencies)
- Responsibility to respond to the needs of society
- J Striving for integration
- Duty to prepare for professional practice.

The same ideas can give rise to different curriculum designs and to different processes of reaching that design.

#### What is a Curriculum?

A curriculum can be thought of as a managerial, ideological, and planning document that has three major components: structure, content, and process. A curriculum presents a reasoned picture of the subject to be studied and defines the teaching processes, learning processes, and intended outcomes of that study. A curriculum, then, is much more than a 'syllabus', which is just a simple listing of the content or topics of the course or programme. The curriculum is a powerful tool and therefore, both within institutions and across the wider society, is often the focus of battles for power and control over structure, content, and process.

Teachers should encourage their students to play with ideas, laugh, and have fun without worrying about being graded and evaluated when they are engaged in creativity-training activities. Rogers (1969) emphasized the importance of freedom from the threat of evaluation and asserted that creativity can be fostered by establishing psychological safety through the unconditional acceptance of each individual's worth.

Sometimes teacher ask the students to explain a response if you are unclear about the relevance of the response to the problem being addressed. This

practice, known as the principle of deferred judgment (or unevaluated practice), simply means that judgment is deferred until the individual has had an opportunity to explore several possible answers or solutions to a given problem. The principle of deferred judgment, first elaborated on by Osborn (1963), has consistently been shown to be an essential ingredient for creative thinking. Several researchers (Amabile, 1985; Baer, 1996) have found evidence to support this claim. The main purpose of unevaluated practice is to free children from the fear of making mistakes.

#### Objective

- To study the major problems of curriculum experienced by students/learners
- To understand the pointers that frames a productive curriculum
- To identify the need of skill-oriented curriculum

#### Results

#### **Curriculum Standards:**

In some countries, curricula or curriculum standards are set by the state; in others they are set by regulators and professional bodies. Not surprisingly, most curriculum standards address a similar range of fundamental issues such as:

Curriculum Standards Follows	Educational objectives
	Curriculum structure and design
	Content
	Teaching and assessment
	Curriculum management
	Roles and responsibilities
	Evaluation of curriculum effectivene

#### Table no. 1: Curriculum Standards

Fundamental issues on Curriculum Standards.

#### Factors influencing curriculum design:

While writing a curriculum is a process that requires consideration of values, beliefs and context, it also deserves a review of current evidence and an explicit development process that conveys messages about quality assurance and sends recognition of interested parties. Gone are the days when subject matter experts or workforce managers wrote down what needed to be learned on their own. Curriculum design today includes many other factors arising from the democratization processes. of social the development of educational theory, political imperatives, and economic concerns. Box 1, for example, highlights some of the influences on modern medical curricula and their spheres of influence. Each of the influences cited here has left its mark, and the remnants of each must be incorporated into the new generation of curricula, enriching each new reformulation in relation to previous models.

#### **Curriculum Models:**

Curriculum models have been the subject of academic and business theory since the mid-20th century, when Tyler first put forward the idea that: "...some notions of the goals to be achieved are badly needed in pursuit of a. These educational goals become the criteria by which materials are selected, content is outlined, teaching processes are developed, and tests and examinations are prepared.

#### **Professional practice:**

In the following, the development of curriculum models and learning theories will be discussed. However, other factors that are not part of academic discourse are equally important in shaping ideas about the curriculum. Some of these factors affect the content of the curriculum, others its design.

#### **Learning Theories:**

Learning ideas influence the design of curricula in two ways: first, by influencing the structure of education and training, and second, by influencing the choice of teaching and learning methods. These two are related. In adopting ideas about learning that can influence curriculum design, curriculum designers need to make a very clear distinction between what is an evidencebased theory of learning and what is simply a framework or someone else's idea or perception. Learning theories and observing phenomena have influenced curriculum design. When goal-based curriculum models were dominant, so was behavioral theory. As with any other aspect of education, the application of learning theory and observation of phenomena to pedagogical practice is a never-ending task as social and cultural perceptions change. Thus, when goal-oriented curriculum models were dominant, behavioral theory was also at its peak, and the role of the teacher in behavior formation was a major focus. Later, however, the focus shifted away from teaching and towards learning. This is more of a social value than an educational vision. There is no reason in educational or cognitive psychology that prevents a teacher from teaching.

#### **Cognitive Development:**

Cognitive Development Theories provide additional information for curriculum designers. The philosopher Immanuel Kant and the psychologists Lev Vygotsky, Edward Bartlett (Bartlett, 1932) and Jean Piaget (Piaget et al., 1952) and many others have defined cognitive development in terms of schemas.

A schema is a cognitive framework or memory structure that helps organize and interpret information. As experiences occur, this new information is used to modify, add, or change previously existing schemas.The result is learning. "Assimilation" is the process of incorporating new information into already existing schemas. "Adaptation" involves changing existing schemes or ideas as a result of new information or new experience. New schemas may also be developed during this process. The important question here is the quality of the initial drafts as they are created.

#### **Integration:**

In a discipline-based curriculum, knowledge and skills are presented as distinct subject areas and integration must occur entirely in the student's mind through their application in practice. An integrated curriculum organizes the material to be learned around a practice-related unit, or at least tries to relate learning from different disciplines.

#### **Basic and Options:**

The specification of basic (or mandatory) and optional sections of the curriculum was a response to the perceived problem of content overload in medical education. However, 'core' can have different meanings in different contexts and if a 'core and options' model is chosen then the basis on which the core is chosen should be known and agreed upon.

#### Modular:

A module is a self-study unit. It must have its own results (however expressed), activities and evaluations. Students can take several study modules at the same time. The modules are planned according to the selected framework curriculum. In an integrated course, the modules tend to have similar structures, with the vertical themes of the course spiraling through the syllabus covered in each module.

#### Some Questions Frame working the Curriculum Of An Educational Course Or Program:

#### What is the course really about?

This question determines the content of the course. It also forms the basis of the topic and provides clarity on what exactly needs to be conveyed, thereby identifying the specific area of interest within the overall area/topic.

#### What is the need for the course?

The answer to this question identifies the problem that needs to be addressed and helps educators to implement the program on the right track.

#### Who needs the course?

This question is very important as it identifies the student (target audience).Since each individual has different interests and goals in life, their subject preference and consequently their subject preference will be different. Therefore, it is necessary to identify the right group of students as not all will benefit equally from the same course/program due to different life histories.

## What is the current situation of ideal students of the job profile?

This question helps the teacher determine the student's background or basic knowledge and understanding in order to accurately plan their teaching strategies. Teaching according to the ability and understanding of the students makes the curriculum personalized and optimizes the outcome.

#### What is the desired end result of the course?

This answer indicates the goal of the curriculum or end product that educators hope to achieve through this program. The goal is central to the entire curriculum and therefore clarity about it is of paramount importance.

## What methods can be used to deliver the course?

This question helps teachers generate ideas and identify the different teaching processes. This factor in curriculum development has great scope for innovation as the teaching conditions, environment, tools and equipment change over time. This innovation through brainstorming is also necessary because each generation of students is different from the previous one and therefore any change in curriculum style makes it outdated and irrelevant.

# Which method is best suited to prepare the students psychologically and physiologically for the desired outcome?

This question undermines and determines the right process to shape learners for the desired

outcome and the future scenario for which the program is training them. The correct answer makes the curriculum very effective and will benefit the students in the long run.

#### How long will it take for students to understand, teach and master the skills and knowledge taught in the course?

This question helps educators to determine the duration of the curriculum. Also by analyzing the general lifestyle of the students and their reception of the program on a psychological level, the frequency of the lessons can be efficiently determined.

#### **Teaching and learning methods:**

Decisions about teaching and learning methods result from the planning of the previous phases. But there is no one-to-one relationship between course intentions and teaching and learning methods. Each resume designer has a variety of options that can produce the exact same results. And every strength of a teaching or learning method is matched by weaknesses. There is no magic bullet or educational panacea.

The teaching and learning methods and resources a curriculum designer can choose from include, but are not limited to, the following:

- ) Simulations; clinical skills laboratories, including communication skills training.
- ) Lectures
- ) Seminars and tutorials
- J Independent or guided group work
- ) Practicals.
- Available learning opportunities.
- Resource based learning, including e learning and library work
- ) Formative assessment, appraisal, and feedback on learning
- ) Clinical experiences.

The curriculum designer should state what balance of these methods might be desirable and expected. But the method alone will not determine effect on learning unless it is used in an appropriate manner.

#### **Teachers' beliefs:**

In this section of the paper, we describe and discuss beliefs articulated by teachers participating in the research. We do this under three headings:

- beliefs about children and young people;
- beliefs about teaching; and
- Beliefs about educational purpose.

In analyzing the data, we were struck by the similarity in the beliefs expressed in this small group of teachers, despite being in different educational sectors. These teachers shared, for the most part, a professional discourse that seemed to articulate many of their beliefs about students and their role as teachers, as well as their views on the purposes of education, in quite similar ways. As we will show in more detail below, these discourses appear to be rather narrow in scope and focused more on short-term goals? This raises important questions about the nature and extent of discursive resources available to teachers and how this affects their agency, or lack thereof.

We strongly caution against this before we begin our discussion, as some of the following discussions seem to portray teachers in a negative light. This is not our intention and we would like to emphasize from the outset that throughout the project impressed we were by the professionalism, competence and commitment of the teachers involved in the research. all Furthermore, we emphasize as shown in our theoretical model. As ecological building, it is also subject to structural, cultural and material influences. Teachers' professional discourses are largely as they are because teachers' positioning in their professional environment is strongly influenced by factors often beyond their immediate control.

#### Another Expressed Strong Concern About Curriculum Development:

Interestingly, despite this apparent reluctance to rock the boat and/or become more actively involved in curriculum development in the school, all teachers were willing to criticize a variety of issues that they found shocking. These included the effects of accountability, particularly the overemphasis on achievement mentioned in the previous section (which is accounted for in prior knowledge), and a perceived trend that teachers' voices are ignored in favor of people's opinions with little or no direct connection to schools and problems with workload. Many of these complaints were framed by the fact that these teachers clearly took pride in their work. At first glance, it is disconcerting how professionals seem to abdicate responsibility for aspects of their work and then complain that they are not being listened to.

#### **Basic Teaching Strategies:**

The basic technique for improving communication skills is called brainstorming. The first step in this process is to present students with a problem with many possible alternative solutions. Brainstorming can be done individually or in group sessions. In the early stages of a brainstorming activity, students should write down or verbalize every thought and idea that comes to their mind, no matter how silly, crazy, or far-fetched. The best way to encourage free and unconventional thinking is to value quantity and refrain from criticism and evaluation until students have exhausted their entire store of ideas on a particular problem. The questions you ask in your classroom can leverage the principle of fluency by incorporating a range of activities that elicit a large number of responses. Unlike the convergent production techniques discussed above, these exercises should not have a predetermined or "right" correct answer. Rather, they should be designed to encourage the learner to produce a large number of responses, and hopefully practicing this mindset will help break the learner out of previously acquired habits of thought that predispose him or her to focus

primarily on remembering to leave and convergent thinking.

#### Conclusion

Therefore, curriculum development is an essential aspect of education delivery and, if done properly, will lead to optimal outcomes. When innovation is introduced into curriculum development, the course/program becomes highly relevant to the current scenario and effectively achieves learning objectives and provides students with a sense of accomplishment. The nature of a curriculum depends on its students and the function of the curriculum on its goal; Therefore, only through a thorough understanding of both units can an accurate curriculum be created that will produce positive impact and results.

#### **Future Research Planning:**

Future research can be oriented towards strengthening the teaching profile for Education 4.0 by taking the findings of this research in university curricula to explore ways to integrate other educational community members, industry, and social actors to develop innovation competencies. Though this study focused on teachers' profile for programs related to education, the findings may be of value for the characterization of teachers in other disciplines, in the sense that they are also trainers of talent.

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#### References

- 1. Gert Biesta, Mark Priestley & Sarah Robinson (2015) The role of beliefs in teacher gency, Teachers and Teaching, 21:6, 624-640, DOI: 10.1080/13540602.2015.1044325
- 2. Ramírez-Montoya, M.S.; Loaiza-Aguirre, M.I.; Zúñiga-Ojeda, A.; Portuguez-Castro,

M. Characterization of the Teaching Profile within the Framework of Education 4.0. Future Internet 2021, 13, 91. https://doi.org/10.3390/ fi13040091

- Fadel, C.; Bialik, M.; Trilling, B. Four-Dimensional Education: The Competencies Learners Need to Succeed; Center for Curriculum Redesign: Boston, MA, USA, 2015; Available online: https://www.researchgate.net/publication/ 318430582\_Four-Dimensional\_Education (accessed on 28 February 2021).
- Renzulli, J. S. (2017). Developing creativity across all areas of the curriculum. In R. A. Beghetto & J. C. Kaufman (Eds.), Nurturing creativity in the classroom (pp. 23–44). New York, NY: Cambridge University Press.
- 5. Osborn, A. F. (1963), Applied imagination (3rd ed.). New York: Charles Scribner's Sons.
- 6. Amabile, T. M. (1985). Motivation and creativity: Effects of motivational orientation on creative writing. Journal of Personality and Social Psychology, 48, 393–399.
- Baer, J. (1996). The effects of taskspecific divergent thinking training. Journal of Creative Behavior, 18(1), 11– 22.
- 8. Rogers, C. (1969). Freedom to learn. Columbus, OH: Charles E. Merrill.
- Bartlett, F.C. (1932). Remembering: A Study in Experimental and Social Psychology. Cambridge, England: Cambridge University Press.
- 10. Piaget, J. and Cook, M.T. (1952). The Origins of Intelligence in Children. New York, NY: International University Press.
- 11. Simpson, M.A. (1972). Medical Education. A Critical Approach. London: Butterworths.
- 12. Cox, K.R. and Ewan, C.E. ed. (1982). The Medical Teacher. Edinburgh: Churchill Livingstone.
- 13. Newble, D. and Cannon, R. (1983). A Handbook for Clinical Teachers. Boston, MA: MTP Press

- 14. Roth, W.-M. (2005). Doing qualitative research. Praxis of method. Rotterdam: Sense Publishers. Fisher, W. R. (1987). Human communication as narration: Toward a philosophy of reason, value and action. Columbia, South Carolina: University of South Carolina Press.
- 15. Nataonal Council for Curriculum and Assessment (NCCA), (2004). Curriculum assessment and ICT in Irish context: A discuss on paper. http://www.ncca.ie/uploadedfiles/ECPE/C urriculum%20AssessmentandICT.pdf adresnden.
- 16. Das, Kaushik, and Piashi Das. "Online Teaching Learning in Higher Education during Lockdown Period of COVID-19 Pandemic in India." International Journal on Orange Technologies, vol. 2, no. 6, 2020, pp. 5-10.
- 17. Das, Kaushik. (2021)."Integrating E-Learning & Technology in Mathematics Education." Journal of Information and Computational Science, vol. 11, no. 1, pp. 310-319.
- Chand, B. & Das, K. (2022). Professional 18. Development of Redefining Teacher Education During Post Independent India. International Journal of Advanced Multidisciplinary Research. Volume 9, Issue 6 -2022. Pp 96-105. DOI: http://dx.doi.org/10.22192/ijamr.2022.09.0 6.009
- Das, Kaushik.(2021). "Inclusive Mathematics Education in Classroom Practice." Shanlax International Journal of Arts, Science and Humanities, vol. 8, no. 3, 2021, pp. 1-5. DOI: https://doi.org/10.34293/sijash.v8i3.3462
- 20. Das, K. (2019). Significant of mathematics laboratory activities for and learning. teaching International Journal on Integrated Education, 2(5), 19-Retrieved 25. from http://journals.researchparks.org/index.php /IJIE/article/view/127.

- Das, K. (2019). Pedagogical approaches in mathematics: Indian perspectives and practices. International Journal of All Research Writings. Vol. 1 Issue. 3. September 2019. ISSN (O) - 2582-1008.
- 22. Nieveen, N. (2011, September 14). Teachers' professional development in curriculum design in the Netherlands. Paper presented at the European Conference for Educational Research, Berlin.



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