

TO HELP TEACHERS IMPROVE THEIR TEACHING COMPETENCE
AND DEVELOP THEIR EDUCATIONAL LEADERSHIP

EMPOWERING EDUCATORS: MASTERING CURRICULUM DECISION MAKING

DR N ASOKAN PH.D

CURRICULUM MATTERS

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Curriculum Decisions Matters

Effective curriculum decision making is the backbone of exceptional education. It has the power to inspire, engage, and transform students, teachers, and entire learning communities. Yet, for many educators and educational leaders, curriculum development and implementation can be a daunting and complex task. The ever-changing educational landscape, diverse student needs, and competing stakeholder demands can make it challenging to create and implement a curriculum that truly supports student success for their life and career

"Empowering Educators: Mastering Curriculum Decision Making" is designed to address this critical need. This book provides educators with the knowledge, competence, and confidence to take ownership of curriculum decision making, ensuring that every student receives a high-quality education.

Curriculum decisions directly influence what students learn, how they learn, and the overall quality of their educational experience. A well-designed curriculum ensures alignment with institutional, local, and national educational goals, standards, and policies. Curriculum decisions shape teaching methodologies, instructional strategies, and assessment approaches. It affects student achievement, engagement, motivation, and future career prospects.

Curriculum decision making involves teachers in professional development, fostering collaboration, and expertise, reflect societal values, cultural norms, and community expectations, help prepare students for an evolving, complex, and interconnected world, influence resource allocation, including budgeting, staffing, and infrastructure.

Curriculum decisions ensure accountability to stakeholders, including parents, policymakers, and the broader community and facilitate adaptability to changing educational landscapes, technologies, and societal needs.

Written for teachers, school leaders, educators, educational leader, education decision makers and education policymakers, this comprehensive guide offers different attributes to be considered in framing curriculum, delivering the content and assessing the students, to empower educators to navigate the complexities of educational policy and reform.

"Empowering Educators" will equip you with the expertise to make informed, curriculum decisions that foster academic excellence, social-emotional growth, and lifelong learning.

Part 1 of this book discusses about the definitions, concepts and ideologies, models of curriculum. The importance of curriculum and syllabus inside the classroom.

Second Part 2 of this book discusses about

why curriculum decision makers have to consider the Mission (Purpose) of Teaching Profession, of Program and the Mission of institution and how it has to be synchronised with vision and core values of stakeholders.

Why educators agrees its students should develop the graduate attributes during their time with the institution and consequently shape the contribution they can make to their profession and society

why the development of metacognition, higher order thinking skills, development of requisite competence of students during their period of study is important and how decision makers to provide space and time for the development that matters.

how the transdisciplinary learning helps the graduates passed out of higher educational institutions to solve the current and anticipating societal problem.

how different dimensions of National Education Policy 2020 (NEP 2020) has to be incorporated into the curriculum

how do we develop graduates for the future of work, where new jobs emerge that just didn't exist, or have not been invented yet.

Why we need to develop the reading of different genre of books among our students during the period of study to understand the different authors ideas, concepts, principles and frameworks, which help the graduates to apply in any new situations.

This book aims to empower educators to take charge of curriculum decision making, providing them confidence and courage to create exceptional learning experiences for all students.

Dr N Asokan Ph.D.

December 2024



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CURRICULUM DECISIONS



PART 1

CURRICULUM DECISION MAKING

INTRODUCTION

The quality and content of the curriculum provided will influence the effectiveness of any educational program. Curriculum decision-makers must consider their own theoretical orientation, the constraints at the local, state level, and national level, and the characteristics of the students and other stakeholders to develop program goals and outcomes. The continuum from flexibility to structure is a critical factor across most of the dimensions of the curriculum.

Informed decision-making for formulating educational policy at the global, regional or local levels has become increasingly complicated due to the changes we are facing culturally, economically and productively in the 21st century. Intellectual capital, both individual and social, which is expected to be developed through lifelong learning, is also considered to be an active force in creating economic growth and welfare in all societies. Accordingly, the abilities and skills needed to produce, develop and manage knowledge and innovations are of crucial significance for all modern societies.

As global change continues to accelerate, the importance of curriculum decisions in enhancing teaching, learning, and assessing grows. The world is changing, and how we prepare students to take up their roles and responsibilities must change apace. In its “Education 2030” position paper, the Organisation for Economic Co-operation and Development (OECD) asserts, “The concept of ‘curriculum’ should be developed from ‘predetermined and static’ to ‘adaptable and dynamic.’ Schools and teachers should be able to update and align the curriculum to reflect evolving societal requirements as well as individual learning needs.”

Curriculum decisions are important in the classroom because they shape exactly what students are going to learn, and how they are going to learn it. Since curriculum plays such a pivotal role in education, teachers must constantly be making decisions that relate to their students’ curriculum.

Curriculum is a powerful lever for changing student performance and well-being, and for preparing students to thrive in and shape the future. It can help to ensure consistent levels of quality across types of education provision and

age groups, contributing to a more equitable system. It can also guide and support teachers, facilitate communication between teachers and parents, and ensure continuity across different levels of education.

However, curriculum can equally limit the creativity and agency of students and teachers if there is not sufficient space for them to explore their own interests and sense of purpose. Also, if curriculum remains unchanged for years, it may lack the necessary innovation to adapt to changes in society.

Amid growing global debate on globalisation and migration, climate change, and technological advancements such as artificial intelligence, countries began to revisit questions on the kinds of competencies students would need for the future and how these could best be fostered through curriculum.

It is important to keep in mind that the term ‘curriculum’ refers not only to specific planned activities but to all of the planned and unplanned ‘interactions, experiences, routines and events’ that occur in the early learning setting (ACECQA, 2011, p. 203; DEEWR, 2009, p. 9).

Educators develop the program based on their sound knowledge of each student so that the experiences, interactions, and routines each student engages in are relevant to them, respectful of their background and recognize and build on their current interests and abilities asserts Guide to the National Quality Standard (NQS) (ACECQA, 2011, p. 23).

Constructing a curriculum is an important task because the curriculum ‘offer(s) opportunities for pupils of all ages to move beyond the experience they bring to school and acquire knowledge that is not tied to that experience’ (Young, 2014, pp.8-9).

Knowledge and education are considered among the major factors contributing to the reduction of poverty, sustainable development and economic growth –and it is the curriculum that is increasingly viewed as foundational to educational reforms aimed at the achievement of high quality learning outcomes. The curriculum represents a conscious and systematic selection of knowledge, skills and values: a selection that shapes the way teaching, learning and assessment processes are organized by addressing questions such as what, why, when and how students should learn.

More broadly, the curriculum is also understood as a political and social agreement that reflects a society’s common vision while taking into account local, national and global needs and expectations. The curriculum, in other words, embodies

a society's educational aims and purposes. Contemporary curriculum reform and development processes therefore increasingly involve public discussion and consultation with a wide range of stakeholders.

The inspiration to examine the context of curriculum change again arose from a desire to learn more about what factors may be responsible for the decision-making process and are likely to determine the rigorous and high quality of a world-class curriculum.

Clearly, the quality and content of the curriculum provided will influence the effectiveness of any educational program.

1.1. CURRICULUM MATTERS

A carefully designed and well-executed curriculum plays a significant role in the success of a programme and its students and teachers. Strong curricular design, when delivered by well-prepared and qualified educators, ensures that students can achieve the appropriate learning outcomes. When teachers understand the benefits of effective curricula, they carry that expertise into their own planning and design. By doing so, teachers can create learning environments optimized for student success and growth.

Curriculum Matters

A quality curriculum plays an important role in shaping and reflecting the culture of the people and their community. Carefully chosen curricula reflect the culture and priorities of the communities, states and countries that surround them. Well-designed curricula can help students embrace their cultural identity, refine their personal values and become strong, global citizens. Teachers should consider the communities in which their schools are located, as well as the respective backgrounds of their students, when framing and deciding their curriculum.

A rigorous and world-class quality Curriculum ensures that students and teachers keep up with global trends. The world-class curriculum should be dynamic.

Just as the skills and knowledge students will need to be successful are constantly in flux, world-class and effective curriculum should adapt and change to prepare students for success at the next academic level – or in the professional world.

A high-quality curriculum benefits students by establishing internal consistency for continuous improvement. Educational leaders, administrators and educators must work to ensure that internal consistency within the system and programme level is a key aspect of their curriculum. This is achieved when students can expect to acquire the same competency and understanding regardless of the mastery level of their teachers.

A good curriculum creates measurable benchmarks and observable learning outcomes. When using a high-quality curriculum, assessments will be easy to access, administer and evaluate. A system with checkpoints and benchmarks helps teachers better determine how students are responding to the lesson plans and where adjustments are necessary.

A successful curriculum encourages collaboration. The key to building a successful curriculum is clear communication between administrators, parents, teachers, and all the stakeholders. When the primary stakeholders have frequent discussions on what is or isn't working, curricular adjustments can help increase students' chances of meeting academic benchmarks. These discussions are also an excellent avenue for exchanging best practice strategies.

1.2. DEFINITIONS OF CURRICULUM

The International Bureau of Education at UNESCO, The United Nations Educational, Scientific and Cultural Organization, says, “In the simplest terms, ‘curriculum’ is a description of what, why, how and how well students should learn in a systematic and intentional way.”

Curriculum is the heart of any educational endeavor. Research studies focusing on curriculum provide inputs for enhancing the relevance and effectiveness of the curriculum. Tanner and Tanner (1980) have observed that curriculum has a long past but a short history. Curriculum as a field of systematic inquiry emerged only during the early 1920s (Foshay, 1969, p.275).

Some feel that a curriculum must detail exactly what to teach, and when and how to teach it. Others agree that while this is one type of curriculum, a curriculum that provides learning goals and guidance to teachers in developing activities and

interactions is more appropriate for students. Curriculum can take the form of guidance for deciding what and how to teach or be highly scripted telling the teacher not only what the content should be on any given day, but also exactly what to say when teaching the content.

Although views of what makes a curriculum a curriculum vary, all agree that determining the content and how to teach it is critical. For example, a curriculum answers the question: “What should be learned?” asks Katz, L. G. (1993). It also reflects “the set of goals which are the aims of education for children,” says Spodek, B., & Saracho, O. N. (2003), including those that support “students’ physical, social, emotional, and cognitive growth” asserts Bowman, et al., (2001). It also is influenced by “concepts of what repertoire of knowledge and skills it is important for the student to master, what role the student shall have in achieving mastery, and what organization of learning experiences is most likely to yield maximum cognitive power” says Biber, B. (1977).

Spodek, B., & Brown, P. C. (1993) says any curriculum model, therefore, is “an ideal representation of the theoretical premises, administrative policies, and pedagogical components of a program aimed at obtaining a particular educational outcome.” In sum, no matter what model is ultimately used, curriculum “affects students by initiating learning and by exposing students to experiences designed to help all children to attain skills and knowledge and to change values and feelings” concludes Vold, E. B. (2003).

“Curriculum is more than a collection of enjoyable activities. A curriculum is a complex idea containing multiple components, such as goals, content, pedagogy, or instructional practices. The curriculum is influenced by many factors, including society’s values, content standards, accountability systems, research findings, community expectations, culture and language, and individual children’s characteristics.” The definition is given by The joint position statement of the NAEYC and the National Association of Early Childhood Specialists in State Departments of Education.

1.3. CONCEPT OF CURRICULUM

The idea of curriculum is hardly new - but the way we understand and theorize it has got altered over the years - and there remains considerable dispute as to its meaning. It has its origins in the running/chariot tracks of Greece. It was, literally, a course. In Latin, the curriculum was a racing chariot; currere was to run or the ground to be covered to reach a goal. Traditionally curriculum was regarded as the relatively

standardized ground covered by students in their race toward the finish line i.e., a degree or diploma.

The word “curriculum” is used with a variety of meanings.

Curriculum as a field of systematic inquiry emerged only during the early 1920s (Foshay, 1969, p.275). It was not until 1918 that the first book devoted to the curriculum was published. Written by Franklin Bobbitt and titled simply ‘The curriculum’, this volume is recognized as the milestone that marks the emergence of curriculum as a field of study (Zais, 1976, p.5).

According to Ochs (1974) “the term curriculum is often used to designate equally a programme for a given subject matter and for a given grade, a programme for a given subject matter for the entire course (study cycle) or the whole programme of different subjects for the entire course”.

A useful starting point for us here might be the definition offered by John Kerr and taken up by Vic Kelly in his standard work on the subject. Kerr defines curriculum as, ‘All the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outside the school. (quoted in Kelly 1983: 10; see also, Kelly 1999).

According to Yalden (1987, p3) “...the curriculum includes the goals, objectives, content, processes, resources, and means of evaluation of all the learning experiences planned for pupil both in and out of the school and community through classroom instruction and related programs.”

In general, curricula deal with making general statements about learning purposes and experience, evaluation, and the role relationships between teachers and learners. Moreover, they can be localized and based on accounts and records between what actually happens at the classroom level as teachers and learners apply a given curriculum to their own situation. These accounts can be subsequently modified to be a curriculum in general; thus, the developmental process is ongoing and cyclical (Nunan, 1988).

Curriculum refers (Print, 1988) to all the planned learning experiences offered to learners by the educational institution, together with the experiences that learners encounter when those intensions are implemented.

Curriculum (Oliva 1988) is defined as a “plan or program for all of the experiences which the learner encounters under the direction of the school [organization or institution]. In practice, the curriculum consists of a number of plans, in a written form

and of varying scope, which delineate the desired learning experiences. The curriculum, therefore, may be a unit, a course, a sequence of courses, the school's [organization or institution] entire program of studies and may take place outside of the classroom or school" (p. 9 - 10).

There are differences in scope and types of curriculum depending on who is doing the organizing of the scheme of learning events, who is involved in providing the learning \ teaching environment, and how the subjects and experiences are separated or linked in advance for the learner (Melrose, 1996).

A curriculum unit (Anderson et al 2001, p111) consists of one or more educational objectives that require approximately two or three weeks to achieve. If there is more than one educational objective, the objectives are related in some way, often in that they pertain to the same topic. Interdisciplinary units and integrative units are also examples of curriculum units. Within a curriculum unit, there may be several instructional objectives, each associated with a lesson that lasts one, two, or perhaps three days.

An analysis of the various definitions of curriculum reveals some of the following important attributes associated with the concept of curriculum.

- Related to an occupation
- Objective-oriented content
- Planned learning experience
- Criteria for evaluation of student's performance

The Curriculum Plan is implemented through the medium of instruction. Taylor and Colin (1979) have distinguished between 'intended curriculum' which refers to the prescriptions in the curriculum document and "the curriculum in operation or operational curriculum". When an "intended curriculum" is enacted in a classroom or given life through teaching it becomes an 'operational curriculum'. The 'intended curriculum' is an inert document containing the objectives of the curriculum, content matter, time schedules, guidelines to teaching and learning and the performance standards expected. The "operational curriculum" deals with the processes of teaching and learning, organization of the class and the milieu in which instruction takes place.

Many factors influence / constrain teacher's efforts to implement the intended curriculum and make it a functional or operational curriculum. This may result in certain gaps between intention and realization.

According to Ofsted's Education Inspection Framework (Ofsted, 2019), the curriculum is defined according to its intent, implementation, and impact.

The intent is “a framework for setting out the aims of a programme of education, including the knowledge and understanding to be gained at each stage”.

Implementation is a means of “translating that framework over time into a structure and narrative within an institutional context”.

The impact is the means of “evaluating what knowledge and understanding pupils have gained against expectations.

1.4. CURRICULUM UNIT

A curriculum unit consists of one or more educational objectives that require approximately two to three weeks to achieve. If there is more than one educational objective, the objectives are related in some way, often in that they pertain to the same topic.

Interdisciplinary units (e.g., a unit on airplanes involving history, science, mathematics, and literature) and integrative units (e.g., a unit on report writing involves source of information and select information about a famous person in Indian history, write informative text that important aspects of the life of a famous person in Indian history, students opinion of how the famous Indian's contributions impacted society and deliver a talk about a portion of the written report) are an example of curriculum units.

Within a curriculum unit, there may be several instructional objectives, each associated with a lesson that lasts one, two or perhaps three days.

A focus on curriculum units offers four advantages over a focus on daily lesson.

1. Curriculum units provides the time needed for more integrated holistic learning. Over time students can be helped to see relationships and connections among ideas, materials, activities, and topics; that is, the unit structure helps them see the forest as well as trees.
2. Curriculum unit provide more flexibility in the use of available time. If a teacher runs out of time on a particular day, the activity can be carried out the next day. The availability of “flexible time” in a curriculum unit is important because, activity do not always go as planned. In addition, some students need more time to learn than

- others. Curriculum unit allow teachers to accommodate these classroom realities.
3. Curriculum unit provide a context for interpreting daily objectives, activities, assessments. For example, the importance of a lesson on writing declarative sentences is often better understood in the context of a unit on writing paragraphs.
 4. The larger curriculum units provide sufficient time for instructional activities that allow for the development and assessment of student learning of more complex objectives. Objectives involve Analyze, Evaluate and Create typically require longer time periods for students to learn.

1.5. TYPES OF CURRICULA

Curriculum consists of both the plans for learning and the actual delivery of those plans. Hence, it is clear that a curriculum may include many elements beyond written guides. In fact, there are different kinds of curriculum.

Glatthorn, A. (ASCD, 1987) in his book Curriculum Renewal has identified six types of curriculum viz., Recommended curriculum, Written curriculum, Taught curriculum, Supported curriculum, Tested/assessed curriculum, Learned curriculum. Wilson (1990) has identified ten types of curriculum viz., Overt, explicit, or written curriculum, The hidden or covert curriculum (Longstreet and Shane, 1993, p.46), The null curriculum (Eisner, 1985 p.103), Phantom curriculum, Concomitant curriculum, Rhetorical curriculum, Curriculum-in-use, Received curriculum, The internal curriculum, The electronic curriculum (Wilson, 2004).

Porter and Smithson, (2001) distinguish the intended from the assessed curriculum, and the enacted from the learned curriculum. McKnight et al., (1987) and Schmidt et al. (1996) have distinguished among the intended, enacted, and learned curricula.

2.0. SYLLABUS

A syllabus is a descriptive document of a course. It is the study of the outline and timeline of a particular course. It will typically give a brief overview of the course objectives, course expectations, list of readings, assignments, homework deadlines,

exam dates, etc. it connotes both the subject as well as the topics covered in the course of the study. The syllabus determines the basic content of instructions in a given subject and the range of knowledge and skills which the pupils must acquire and establish in detail, the themes and individual points to be studied in each school year. The syllabus is a refined detail of the curriculum at a particular stage of learning for a particular subject.

SYLLABUS

A syllabus is a contract between faculty members and their students designed to answer students' questions about a course, as well as inform them about what will happen should they fail to meet course expectations. It is also a vehicle for expressing accountability and commitment over time, the notion of a syllabus as a contract has grown more literal but is not in fact an enforceable contract.

Hutchinson and Waters- define that syllabus as a document that says what will be (least what should be) learned. Syllabus is significant in education due to the following reasons:

- Syllabus informs students about the objectives of the course.
- Provides a kind of contract between instructors and students to document expectations for assignment and grade allocations.
- Provides a guiding reference as a resource to which students, and instructors can refer for logistical information
- It holds all the information you need to know regarding what is expected of you and what you need to do to prepare for each class.
- Helps instructor prepare and organize the course.
- Conveys to students a clear idea of the course content and knowledge, they will gain throughout the course.
- Teacher and students are brought together.
- Helps to avoid conflicts with the other courses.
- Provides strategies for evaluating students' achievement.
- Provides appropriate teaching strategies to a subject.
- Provides rationale for the subjects. Example- Why subject is included in the curriculum and its relationships.

Though syllabus focus on particular subjects and curriculum is related to all-round development of a student skill, both are connected to each other. We can say that syllabus is essentially a part of curriculum. Curriculum and syllabus have their own significance in education

The fundamental purpose of a subject syllabus is to provide a coherent and consistent programme of learning, which takes account of the way young people learn, and which has the flexibility to adapt to local circumstances and students' needs, and to be adapted over time.

A syllabus should ensure that:

- a planned and progressive programme of learning activities is constructed to develop understanding over time;
- this programme is consistent with the way children's cognitive, emotional and physical abilities develop;
- there is consistency of approach between subject areas, and with the values and principles that have been articulated;
- inter-disciplinary links are established between the subject areas;
- the development of the competencies articulated in national curricular aims is integrated into subject areas;
- the curriculum takes account of, or is capable of being adapted to, local circumstances and interpreted relevantly in different contexts;
- the curriculum is capable of being adapted to the needs and expectations of different students; and
- the curriculum is constructed to be dynamic, and is capable of being adapted, amended and improved over time.

2.1. CURRICULUM VS SYLLABUS

Curriculum includes

- ✓ Educational Objectives of program and courses
- ✓ Integrated sequence of subjects for the period of the programme
- ✓ Detailed contents (Syllabus) of each course
- ✓ Planned Teaching – Learning Experiences
- ✓ Criteria for methodologies for evaluation

CURRICULUM VS SYLLABUS

Curriculum	Syllabus
A blueprint of a whole level/stage of education system	Content Index List of books to read and for higher studies
Achievable aims and objectives of a whole stage	Achievable objectives, aims of each subject
] Its objective is all-round development of the student	It is supplementary to achieve the objectives
Wide scope/meaning. Rigid scope /meaning Includes content, learning experiences and learning activities	Only includes content
Indicates curricular, co-curricular activities.	Only indicates curricular activities
Understand able to both teachers and Students	Only to teachers
No specific time to fulfil	Time is specified
Helps to prepare syllabus	It is a part of curriculum
Source of school activities	Only limited to classroom activities.

2.3. BREADTH VS. DEPTH

Most curricula simply pack too much information into too little time—at a significant cost to the learner. Teachers everywhere lament how quickly students forget and how little of what they initially remembered they retain over time.

In the new era of science education reform, “less is more” (Speece, 1993). Many reformers argue that it is more important to cover the meaty concepts of a discipline in depth, to avoid a curriculum that is “a mile wide and an inch deep.” (Schmidt, McKnight, & Raizen, 1996)

Some have characterized this debate as “the religious question of whether it’s better to learn 10% of 90% of the subject or 90% of 10% of the subject.” (Brooks, 2000). Brooks and Brooks (1993) speak to this issue very clearly, by saying Constructivist teachers have discovered that the prescribed scope, sequence, and timeline often interferes with their ability to help students understand complex concepts.

3.0. TEACHERS’ ROLE IN CURRICULUM DECISIONS

An effective curriculum provides teachers, students, school leaders and community stakeholders with a measurable plan and structure for delivering a quality education. The curriculum identifies the learning outcomes, standards and core competencies that students must demonstrate before advancing to the next level. Teachers play a key role in developing, implementing, assessing and modifying the curriculum. An evidenced-based curriculum acts as a road map for teachers and students to follow on the path to academic success.

Teachers play a key role in the process of curriculum making, as teachers are the intermediaries who interpret and enact the curriculum, even where it is heavily prescribed (e.g. Monte-Sano, de la Paz & Felton, 2014). Yet while teachers have this important role, surprisingly little is known about how they turn these official policies into school-level curricula. Knowing what teachers choose to include in their curriculum, how they arrive at these decisions, and what they believe they are attempting to do through teaching particular content will fill an important gap in our understanding of teachers’ decision-making. This concern with decision-making is reflected in a growing number of small-scale studies of history teachers from around the world, exploring how disciplinary concepts are used in Spain (Cercadillo, 2015), and the content choices teachers make in New Zealand (Ormond (2016) and in the US (Swalwell, Pellegrino and View, 2015). Understanding teachers’ decision-making is useful for a number of reasons. Meaningful professional development and improved classroom practice are difficult to design without understanding how and why teachers make the decisions they do about curriculum content (Boschman, McKenney & Voogt, 2014). Second, these insights can help guide policy development and teacher education.

Finally, knowing how teachers think about curriculum is a necessary precursor to involving teachers in exploring their own process of curriculum design and how they aim to develop students’ knowledge through this process. It can be argued that this knowledge of teachers’ thinking is particularly needed at a time when teachers

are increasingly seen as ‘skilled technicians’, rather than as ‘intellectuals’ (Mitchell & Lambert, 2015, p.367) engaged in curriculum development.

Ruppar et al. (2015) found five factors that contribute to teacher decisions: context, beliefs about students, teaching and learning, expectations, and self-efficacy. They explain that these core concepts interact to impact the literacy decisions that teachers make in their classrooms, and they “observed a dynamic relationship between teachers’ contexts and their beliefs, expectations, and self-efficacy” (Ruppar et al., 2015, p. 216). Based on their interviews, observations, and collected documents, Ruppar et al. developed a preliminary theoretical framework that states that “the relationships among teachers’ beliefs and contexts were dynamic, and teachers’ self-efficacy provided a key link between beliefs and contexts in influencing literacy decisions” (p. 221)

Another study that explores how teachers make decisions about curriculum focuses on how they decide adaptations for their students. Adaptations are defined in a variety of ways including curricular, instructional, or alternative (Kurth and Keegan, 2014). Kurth and Keegan (2014) focused on the curricular adaptations that teachers were making and how these impacted their students. Results indicate that there are many factors that influence how teachers ultimately make their decisions to adapt curriculum, and it is implied that there needs to be more exploration of ways to promote successful adaptations.

Cannadine et al. (2011, p.233) argue, in many ways the curriculum documents issued by government ministries are not that important, what matters is what teachers do with the documents. Some of the teachers in this study, notably George, Jane and Tanya, have managed to construct curricula which offer alternative conceptions of what the curriculum could look like, and by debating and sharing such ideas teachers can be empowered to see themselves as ‘curriculum makers’ (Lambert & Biddulph, 2015).

3.1. TEACHERS’ BELIEFS

Teachers’ beliefs about educational purposes and knowledge have been identified as central to their curriculum decisions and ideologies (Stark, 2000; Toohey, 1999; Trowler, 1998). Teaching and learning methods and approaches are an important element of curriculum. Teachers’ beliefs about teaching and learning are reported to have a close relationship with their teaching and learning decisions and behaviours (Pajares, 1992).

In her doctoral thesis, Pamela Robert(2014), concluded that curriculum decisions included the common elements of

- course content and structure;
- learning outcomes;
- assessment;
- teaching and learning activities; and
- course evaluation.

Roberts (2014) found in her study, that curriculum decision-making is either selecting course content as the starting point for designing a curriculum or beginning from learning outcomes or beginning their curriculum decision-making by describing the nature of the learning experience decision-makers wanted for students, which typically involved an inquiry or experiential learning approach. These different starting points suggest decision makers have different foci for curriculum decision making with the majority beginning from what they will teach (course content); others beginning by considering what they want students to learn (learning outcomes); and lastly, some beginning from how they want students to learn (teaching and learning activities).

Roberts (2014) found in her study, the broader purposes of higher education, beyond the specific course learning outcomes, what decision-makers are trying to achieve for students in their curriculum are

- to induct students into an academic discipline;
- to prepare students for future work and/or research;
- to develop students' generic cognitive skills;
- to make learning personally meaningful;
- to develop students' understanding of social issues and structures, with a view to social reform; and
- to design a system for learning.

3.2. TEACHER COMPETENCY

Tanner and Tanner's three levels of teacher competency may be helpful for determining a teacher's capacity for enacting particular curricula. At Level I, teachers employ ready-made, routine materials, such as worksheets. Such materials are not critically evaluated and are used in isolated activities. Level II teachers may try to integrate both emerging classroom issues and different content areas, but may not necessarily be successful. At Level III, however, teachers emphasize broad themes that related to specific content areas and also exercise quite a bit of independent judgment in adapting curriculum to children's individual needs. They added that teachers are the "street level" implementers of children's daily experiences in any classroom, curricula also need to be evaluated on how dependent any curriculum is on teachers' experience levels and educational backgrounds.

4.0. CHANGING DEFINITIONS AND MODELS OF CURRICULUM

Higher education academics typically have more control over curriculum than school teachers, where curriculum may be prescribed at national levels. This difference creates an impact on curriculum practices in these sectors. Understandings of the term 'curriculum' have changed over the years.

These changing definitions and understandings of curriculum are reflected in the development of different theories and models of curriculum practice (du Toit, 2011; Kelly, 2009). Toohey (1999) describes control over curriculum as a key advantage of university teaching, providing opportunities for creativity of which university teachers seem largely unaware. However, this differentiation is diminishing as the curriculum is increasingly governed by departmental committees and institutional objectives and policies, which 19 include graduate attributes and internationalisation of the curriculum (Barrie, 2004, 2012; Reid & Loxton, 2004).

Barnett and Coate (2005, p. 5) describe a 'fuzziness' between the concepts of curriculum, pedagogy, and teaching and learning. Curriculum, as a term, has a long history in education, where it was initially used to define the major fields of study in an academic program. As a consequence the term curriculum is still often associated with the syllabus. Modern definitions of curriculum describe a holistic process of making decisions about what is important for students to learn, and how best to facilitate their learning (Prawat, 1992; Toohey, 1999).

Smith and Lovat (2003) describe curriculum development comprehensively as involving decisions and judgements about the knowledge that is considered worth learning, the most appropriate processes and conditions for learning, the practical outcomes of learning, and the means of assessing them. In contrast, in higher education, the major focus of academic discourse has been the terms ‘teaching’ and ‘learning’, and curriculum has been described as a ‘missing term’ (Barnett & Coate, 2005, p. 14), and as one that has little currency (Hicks, 2007).

Yates (2008) also identifies shifts in meanings and emphasis in the use of the terms curriculum and pedagogy in framing academic and policy debates about school education over the last few decades. However she notes that typically the term ‘curriculum’ is used to convey the choices made about educational values and purposes, while references to ‘pedagogy’ are used to place emphasis on the interpersonal instructional act. The recent higher education curriculum literature also makes similar distinctions, using curriculum to encompass educational purposes and the planning and reflecting stages of course design, in contrast with research on teaching and learning, which focuses on instructional interactions (Barnett & Coate, 2005; Knight, 2001; Stark, 2000).

The development of curriculum models is often presented as a chronological progression beginning from a view of curriculum as content, to the development of the product, then process models of curriculum design (Kelly, 2009).

4.1. PRODUCT MODEL

‘Curriculum as content’ describes standard practice before the development of theories and models, where curriculum is understood as the subjects or topics that students study, and the processes of selecting and teaching content are assumed to be unproblematic. Curriculum theory is often presented as beginning with the ‘product model’ devised by Ralph Tyler (1949 as reported in Kelly 2009), which was intended to provide a logical basis for curriculum design. Tyler believed the purpose of the curriculum is to achieve desirable outcomes in students. Hence the product model begins by defining educational objectives, which then provide the basis for subsequent decisions about selecting and organising educational experiences. Evaluation is the final step to determine if the educational objectives were achieved.

4.2. PROCESS MODEL

Kelly (2009) reports that the next major stage of curriculum theory was the 'process' model, which was developed to address weaknesses in the product model. These weaknesses included the tendency to focus on narrow behavioural learning outcomes that are specified prior to teaching, and so are not responsive to students' learning needs and the teaching context (Kelly, 2009). The process model is associated with Lawrence Stenhouse (1975) and focusses on the process of learning, rather than the products. The process model begins from broad learning goals that provide a set of guiding principles for teachers, and curriculum is understood as the interaction between teachers, students and knowledge in the classroom (Kelly, 2009).

In her review of curriculum models and theories, du Toit (2011) presents the contributions of curriculum theorists as a continuum with Tyler and Stenhouse represented towards each end, which she labels as functionalist and progressive views of education. She also includes Bobbitt, Taba, Dewey and Freire on the continuum, and describes their contributions that include bottom up approaches and action research, experiential learning, and emancipatory education developed through dialogue and inquiry learning.

4.3. CYCLICAL MODEL

Despite critiques and new models, the product model of curriculum has continued to be developed and used because of its utility in providing a rational process for curriculum design. New versions are also known as rational or objectives models (Brady & Kennedy, 2010; Knight, 2001; Print, 1993) and as outcomes based education (Prideaux, 2003). Print (1993) describes the evolution of objectives models into cyclical models, which also begin by defining educational objectives and identify a logical sequence for making decisions about curriculum elements. However, cyclical models represent curriculum development as a continuing, cyclical process, where objectives are revisited before beginning a new cycle. Most of these curriculum models define a similar set of processes and elements, which are: formulating learning objectives or outcomes, selecting and organising course content, selecting and organising teaching and learning activities or experiences, assessment, and evaluation.

4.4. DESCRIPTIVE MODEL

However the ordering and relationship between elements varies across models. Further developments examined what teachers actually do in practice, which were developed into descriptive curriculum models to distinguish them from the prescriptive models that are designed to guide teachers' curriculum practice (Print, 1993). Descriptive models found that curriculum development does not follow a linear, sequential pattern and that teachers may begin from any curriculum element and proceed in any order (Print, 1993).

4.5. DECISION-MAKING MODEL

The perennial questions – what is the aim of education, how should it be accessed, what is worth learning, how should the most relevant content be selected, what kind of teachers are needed, what kind of learning environments are needed etc. have been asked since 1599 when the Jesuits compiled their “Ratio Studiorum”, which can be considered the first official educational policy document and a curriculum of all times prescribing the teaching of selected theological works and disciplinary rules. 21st century societies also need a modern ratio studiorum to meet our educational needs in light of current circumstances and environments (political, social and cultural).

Ruutmann, Tiia. (2015) developed a seven questions decision-making model, based on works of Taba (1962), Tyler (1949), Melezinek (1999), Gagne (1985), Pinar (2011), Autio (2006), Eisner et al (1994, 1995, 2002 and 2012), which provides answers to the basics of educational planning, including educational policy making, curriculum development and design and its implementation at institutional levels, which meets the needs of changing conditions related to organising learning, or other decision making.

1. The Why question requires specification of the aims and goals at different levels.
2. The What question entails informed decision-making concerning the content of education/learning, that is expected to produce the desired broader integrated competences of the learners
3. The Who questions requires an analysis of the students and teachers involved in the process of learning.
4. How question describe the potential methods of teaching and learning that can be used for acquisition of the selected learning content.

5. The How Much question requires specifying time as a resource allotted for learning in hours, courses etc.
6. Learning environments necessary for acquisition of the selected content necessitate answering the question Where?
7. The final question in the basic model - When? - forms the basis for an interdisciplinary approach that integrates the content, organises the learning experiences, and provides the sequence of activities for implementing the curricula, educational reforms or projects.

5.0. OUTCOME-BASED EDUCATION

The term outcome-based education was first used and presented by William Spady in his book in 1994., “Outcome-Based Education Critical Issues and Answers” American Association of School Administrators. The accreditation board of engineering and technology (ABET) of the USA in 1997 adopted Engineering Criteria 2000 labelled as EC2000 which shifted the focus away from the inputs. Spady, considered outcome-based education his focus was on school education. ABET has done it has extended this outcome concept to higher education as well.

OUTCOME BASED EDUCATION

The essence of outcome-based education is the focus shifts from the material that is taught to what the students have learned. Inputs would mean what material is taught to the outcomes to what students have learned. Starting with a clear picture of what is important for students to be able to do and then organizing curriculum, instruction, and assessment to make sure this learning ultimately happens. So the essence of OBE or outcome-based education is that the curriculum and instruction and assessment are all to be planned around what you state as outcomes.

5.1. QUANTIFY LEARNING

Policy makers and stakeholders in several countries since 1970s have been emphasizing to have a kind of a grip on what exactly are the students learning - in schools or in higher education institutions so that one can kind of quantify or kind of summarize what exactly the students are learning.

5.2. ESSENTIAL VS. DESIRABLE

Outcome-based education means clearly focusing and organizing everything in an educational system around what is “essential” for all students to be able to do successfully at the end of their learning experiences. That means what is desirable can be much more than what is essential. Focus is on essential.

Prideaux (2003) and du Toit (2011) describe outcomes-based education or OBE as the dominant curriculum model in higher education since the 1990's. OBE is a prescriptive model that provides a rational framework for making curriculum decisions by defining what students are expected to achieve as learning outcomes. Prideaux (2003) argues that OBE provides the benefits of focussing curriculum designers on students and what they will do, rather than on teachers and their intentions. The dominance of OBE also reflects its alignment with political concerns for quality assurance, as it provides a framework for demonstrating that the intended learning outcomes have been achieved. Prideaux (2003) and Knight (2001) restate many of the concerns about OBE previously reported about Tyler's product model, and that led to the development of process models for school education. Prideaux (2003) cautions that learning outcomes need to be significant and enduring, and to focus on higher order thinking, rather than behavioural objectives.

Biggs' (1999) model of constructive alignment represents an OBE model that now underpins many higher education professional development programs and educational policies. Biggs' (1999) model addresses Prideaux's concerns, because it encourages teachers to express learning objectives as levels of cognitive performances, underpinned by a constructivist learning philosophy. However in Biggs' model, learning objectives are determined prior to teachers interacting with students and the teaching and learning context, and hence may lack the responsiveness intended in process models of curriculum. Knight (2001) argues for the process curriculum model because he believes that complex learning objectives are not achieved by tight specification, but by focusing on the complexity of learning as a process, which is also supported by Kandiko and Blackmore (2012b).

Barnett and Coate (2005) identify a different kind of curriculum model to capture emerging trends and provide principles for change in higher education. Curriculum is represented as three domains for forming student identities, which are described as 'knowing', 'acting' and 'being'. Barnett's & Coate's domains attempt to capture curriculum as dynamic interactions between students, content and context. The 'knowing' domain represents acquiring specialist knowledge, and includes both knowing a subject and how students come to know. The 'acting' domain involves both developing skills and the action contexts in which skills are developed. Whilst the 'knowing' and 'acting' domains are commonly evident in curricula, Barnett and Coate (2005) describe the 'being' domain as emerging and under-developed. Their examples of embryonic forms of 'being' in curricula suggest that it involves developing as a person, and taking an intellectual stance towards knowledge.

Barnett & Coate (2005) also acknowledge the essential inter-relatedness of the curriculum domains.

... in developing the skills embedded in a form of knowing (computational, argumentative, analytical etc.) the student is also learning how to engage within that form of knowing, and to take on the identity of what it is to be mathematician, philosopher etc. ...She is acquiring the deep grammar of a discipline and comes not just to think in such terms but to be such a person (Barnett & Coate 2005, p. 61-62).

what is an outcome? "I am able to do something after a learning experience what I was not able to do prior to my learning experience". That is it. So the focus is on do or perform. Not words like know, familiar and so on. The product defines the process. What does it mean? First we define the product. What is the product? The learning outcomes the student should display at the end of a program or a course.

Reservations about outcome-based education are it is against the spirit of education, it only states what is essential, not what is desirable and what more can be done and you are defining so much in detail it is considered as a straight jacket.

Outcome-based education guarantees some essential things and above that it is up to the teacher, it is up to the institution, it is up to the students and other stakeholders to explore beyond that.



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