

Training Tools for Curriculum Development

Developing and Implementing Curriculum Frameworks







United Nations Educational, Scientific and Cultural Organization International Bureau of Education

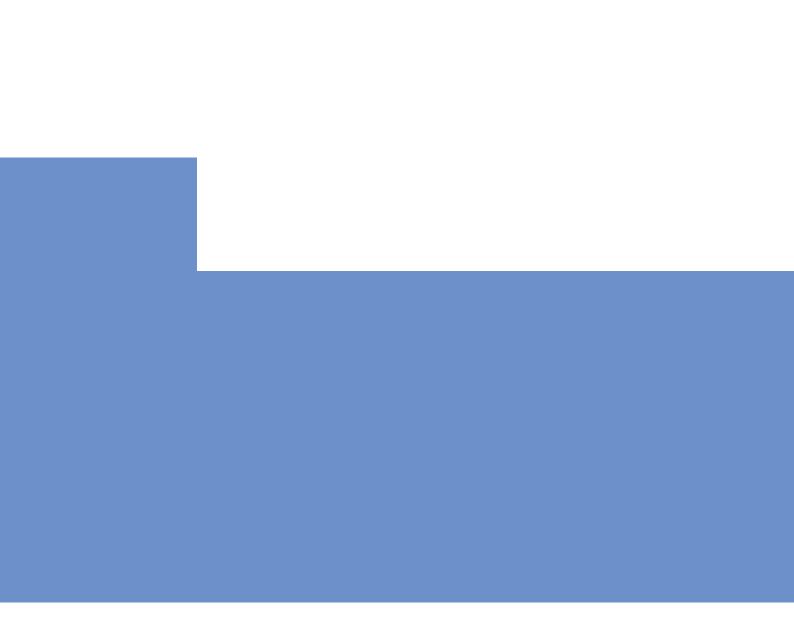


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Conceptual framework

Rationale

In many countries, the traditional curriculum consists of a set of content items, most commonly knowledge and information, which is prescribed by a central authority. This authority expects the prescribed content to be taught and learned by all students, in all schools, often in the same prescribed sequence and at a prescribed pace.

This traditional model has been challenged with increasing intensity over recent decades. There are many reasons for this, but perhaps the four main reasons are:

- 1. The rapid increase in the breadth and depth of human knowledge, and the subsequent challenge of selecting 'bits' of knowledge to constitute a curriculum;
- 2. The realization that the main aim of curriculum should be to produce 'competent' young people, rather than students who can simply remember information and recall it for examination purposes. Curriculum developers (as well as teachers) are searching for ways to ensure that graduates from their schools have a base of knowledge, skills, attitudes, beliefs and values that will enable them to function successfully in the various roles they will have throughout their lives as family and community members, as citizens, as students, as members of the workforce, and so on. So there is increasing emphasis on applying knowledge in various situations in order to understand more deeply through connecting different pieces of knowledge, to imagine different ways of doing things and to solve problems in both logical and creative ways in other words, to be competent.
- 3. As a consequence of this, the realization that not all students need to learn the same content in order to become competent in the ways described above. They can become competent by learning the foundation skills and knowledge, but then pursuing their interests within the curriculum so that learning is more enjoyable and relevant for them.
- 4. A growing belief that the school years are not the only period of their lives when students will learn in structured ways, and that they should be encouraged to be inquisitive and to continue learning throughout their lives. The curriculum should therefore be connected to pre-school learning, to learning acquired outside school and to post-school learning.

From a curriculum design perspective, there is a critical need for more **flexibility**, and one of the approaches available to curriculum developers to achieve this flexibility is to build a 'curriculum framework' as a strong foundation for describing what is to be learned in schools.

This module is not about what a curriculum framework is – i.e. its contents and structure. There are many examples of curriculum frameworks publicly available and accessible, and references to some of these can be found in the 'Additional resources' section of this module. This topic is also covered in other modules within this training course or pack.

What is not so readily available, however, is information and guidance about the **process of developing a curriculum framework** – in other words, the '**how**' rather than the '**what**'. While it is impossible to keep the 'what' completely separate from the 'how', this module focuses on how to address the key questions, issues and challenges that arise during a development process, rather than on what the answers and responses should be.

Purpose

This module is designed to be completed in conjunction with or subsequent to the study of Module 3 – Curriculum Design (*Training Tools for Curriculum Development – A Resource Pack*). Rather than describe what a curriculum framework is, the purpose of this module is to understand how a curriculum framework

can be developed - in other words, the processes that will be required to develop a curriculum framework successfully.

It is not possible to define a set of processes for developing a curriculum framework that will work in every context. The educational context of every country is a complex mix of educational traditions, curriculum development structures, policy priorities, human capacities and financial resources. Similarly, the curriculum of every country has its own, individual strengths and weaknesses, is based on a national approach to and philosophy of education, and most countries have developed a set of either implicit or explicit educational priorities to which the curriculum must respond.

The main purpose of the module is to provide the reader with a clear, staged model of a process, and with some fundamental knowledge and information about each stage. The five stage model proposed for the process is:

Stage 1: Evidence-gathering Stage 2: Preparation Stage 3: Development Stage 4: Implementation Stage 5: Monitoring and evaluation

However, the central challenge for you, the readers of this module, is to transfer and apply its generic content to your individual country or system circumstances.

Overview of training activities

The structure of the Training activities section of the module reflects the five-stage model proposed for the curriculum framework development process. Each of the five stages has at least one training activity attached to it, each of which requires the completion of a number of tasks and sub-tasks.

The broad purpose of the training activities is to place you, the reader or participant, in the position of a curriculum developer, and to have you make some decision about or formulate some response to an issue or challenge associated with the process. You may be asked to do this individually, as a member of a country team or as a member of a small workshop group. It is critical, however, that you are prepared to discuss and share ideas with you colleagues in an open and professional way.

Many of the tasks ask you to complete a table or some other template document. Where this is the case, the documents are available in the 'Training resources' section, and can be readily accessed through the <u>hyperlink</u> embedded in the text.

The conceptual framework

1. The nature of a curriculum framework

Before discussing the process of developing a curriculum framework, it is important to have a clear understanding of what a curriculum framework is. One important distinction to make is that a curriculum framework is not, per se, a curriculum, and the word 'framework' therefore needs to be considered carefully.

A framework, when used in any context, implies a means of organizing and managing content (policies, procedures, concepts and so on) in systematic ways. In most contexts, a framework is not about the

content itself, but about how that content might be structured, controlled or regulated. A framework provides a set of parameters within which the content is to be developed.

In other words, a curriculum framework sets the parameters, directions and standards for curriculum policy and practice.

The word 'framework' also implies flexibility. A framework is not simply a set of rules. Rather, it suggests that some variation and the use of discretion are possible in implementing the framework, providing that the underlying principles and standards are adhered to.

When applied to curriculum, a framework therefore should organize, control and/or regulate the content of the curriculum – that is, the subject descriptors or syllabuses, as well as textbooks and other learning materials. The framework should also apply to a range of matters that can have a direct impact on the development and implementation of curriculum, such as how the curriculum meets the current and future needs of the country, teaching methodology, teacher recruitment and selection, assessment and examination practice, and even class sizes. For this reason, authorities responsible for developing the framework should be mindful of the future – particularly how the framework will impact on the system and what resources will be needed to implement the framework effectively.

However, a curriculum framework should also allow, or even encourage, some flexibility in curriculum decision-making. This flexibility can be provided in a number of ways, such as:

- Some time being available for curriculum (subjects, courses or learning activities) that is developed locally to meet local needs;
- Time allocations being expressed in terms of 'minimum hours', with some time left to schools or local authorities to use at their discretion; or
- Students, particularly in lower and upper secondary stages, being able to choose from a number of
 elective subjects that meet their interests and needs¹, rather than all students being required to study
 all subjects.

However it is defined, it should be remembered at all times that the ultimate aim of a curriculum framework, as with any curriculum initiative, is to provide learning opportunities of the highest quality to students.

All curriculum authorities face challenges and problems in achieving this aim. It is important to realize that developing a curriculum framework is primarily a process of confronting these challenges and solving these problems.

2. Important features of the curriculum framework development process

A curriculum framework is normally a very powerful document. It is the centrepiece of the curriculum and can have an impact on all parts of the education system and on a range of matters related to curriculum policy and practice. The development of a curriculum framework should therefore be part of a carefully considered process, characterized by a number of important features:

• Planned and systematic

Educational change of any significant nature is often difficult. This is primarily because it often challenges traditional or existing beliefs and requires changes to existing practice. This is particularly

¹ This kind of flexibility is particularly important in meeting challenges related to an 'overcrowded' curriculum.

true of curriculum change which can affect thousands of teachers and hundreds of thousands of students, as well as many parts of the education system.

The development of an initial curriculum framework is almost always a challenging task. In addition to the issues mentioned above, there is often a 'conceptual' challenge because the notion of a curriculum framework might not be well understood and many education stakeholders may see it as an unnecessary layer of documentation.

For these reasons, it is critical that the process of developing a curriculum framework be planned and systematic. The process should be effectively planned with properly sequenced activities so as to produce the desired outcome in an efficient and cost-effective way, and within reasonable timeframes. It should be systematic, so that all stakeholders are involved for reasons they understand and in ways that will deliver the best result. These stakeholders will most likely include government departments other than education (for example, workforce and labour market planning, demographics, finance and so on), as well as large organizations (such as teacher unions, universities, religious organizations and employer groups) which need to be advised in advance about the stages in the process.

Comprehensive

It is critical that the process of developing a curriculum framework be comprehensive and considers all appropriate issues and challenges that exist in the curriculum. While subsequent amendments and re-alignments can always be made, it is important that the initial framework be as 'correct' and as complete as possible so that the changes it requires in the education system (particularly those to syllabuses, textbooks and assessment) can be planned and initiated.

Informed

Development of a curriculum framework is a specialized task which should be led and conducted by suitably experienced and qualified people. The process should be the responsibility of people who are experienced in the current curriculum, are aware of its strengths and weaknesses and understand how curriculum is developed effectively in the context. They should be very familiar with the overall education system and context as well as with the concept of a curriculum framework. They should have the experience to think through how a curriculum framework should be structured to address challenges and shortcomings in the curriculum and to meet the needs for the country.

Another dimension of 'informed' is that all decisions related to the curriculum framework and to the development process itself should be based on real information. It is not sufficient that decisions about the structure and content of a curriculum framework be based on the experience of other countries, or on hearsay and general opinion. These decisions should be based on documented evidence of some kind.

This does not always mean that evidence has to be empirical or quantitative. However, it does need to be of sufficient substance to provide reliable and valid advice to curriculum decision-makers.

Targeted

As mentioned earlier, a curriculum framework should not be viewed as a solution to all curriculum problems and challenges. The reasons for developing a curriculum framework and the objectives to be achieved should be clear and well-documented. The development process should therefore be targeted to achieve these objectives.

Broadly supported

Because a curriculum framework will most likely have an impact across the education system, it is important that the process of development have broad systemic support, as well as support from relevant government ministries beyond education. This support will rely on clear information about the process and its progress being provided, and can be demonstrated through attendance at and involvement in meetings, conferences and briefings, as well as policy development support where appropriate.

It is also important that the curriculum framework development process be adequately resourced.

• Inclusive

Lastly, the process of developing a curriculum framework should acknowledge the importance of consulting with education stakeholders. While communicating openly and transparently with stakeholders about the process is important, authorities should also realize that these stakeholders frequently have valid and informed views about and expectations of the curriculum. Their input to the process should therefore be valued.

While the list of stakeholders might vary slightly from context to context, it might include representatives of:

- Students and their families;
- Teachers;
- School leaders;
- School inspectors;
- Teacher training systems and institutes;
- Textbook writers and publishing companies;
- Higher education systems and institutions (universities, vocational and technical colleges and others);
- Employers and relevant industries;
- Societal leaders (such as tribal elders, church leaders and other community leaders); and
- Relevant government agencies.

3. Stages of the development process

There are many ways to develop a curriculum framework. This section describes a generalized five-stage model (illustrated in Diagram 1) which outlines the development process in a logical sequence. However, it is acknowledged that variations to this sequence and to the activities described within each stage may be necessary. The process adopted by each country or education authority will need to:

- take into account the broad political context,
- acknowledge existing processes and responsibilities for curriculum development,
- build on successful curriculum development experiences from the past,
- be adapted to fit the resources (especially human and financial) available for the task.

The first stage (Evidence-gathering) should be viewed as a 'pre-stage'. In other words, it should precede the development process itself. Its broad purpose is to ensure that authorities are certain that a curriculum framework is needed and that it will address real issues that have been identified in the curriculum. Activities to provide evidence supporting the need for a curriculum framework (such as a formal curriculum review or other formal evaluation process) may already have taken place. If they have not, then other means need to be devised to ensure that the decision to proceed with developing a curriculum framework is an informed and responsible one.

The remaining four stages are broadly sequential, as indicated by the arrows between the stages. The final stage (Monitoring and evaluation) should provide information and data that could lead to further improvements in the curriculum framework. There is therefore an arrow which links this final stage to Stage 2 (Preparation), so that the process can re-commence, albeit in a more limited and targeted form.

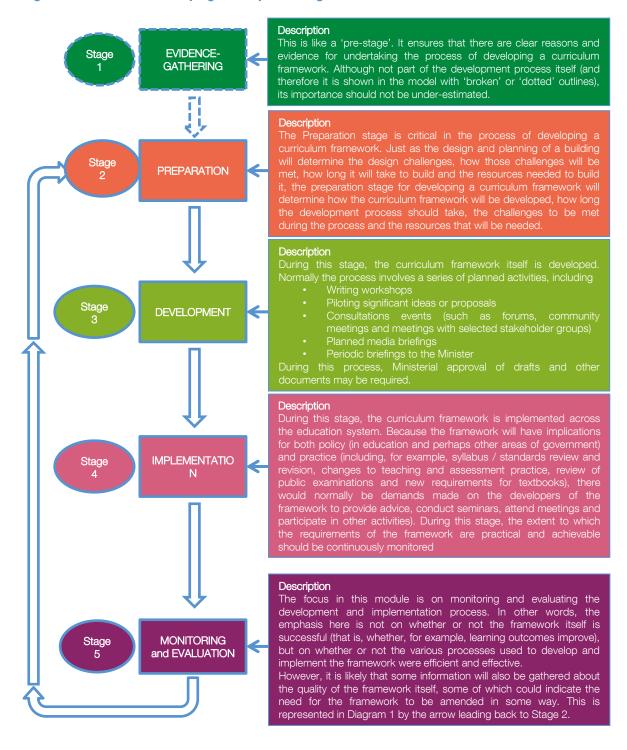


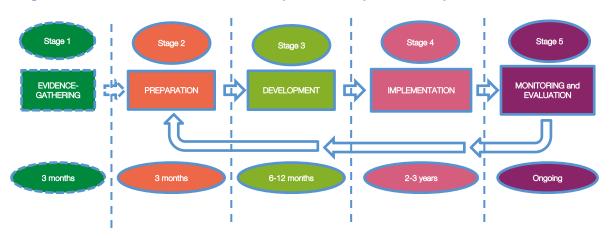
Diagram 1. Process for developing and implementing a curriculum framework

Indicative timeframe

It is impossible to estimate likely timeframes for any of these stages as this would depend so heavily on local circumstances. These circumstances include:

- The amount of preparatory work already done (this is particularly relevant to Stage 1);
- The capability and experience of curriculum framework developers;
- The level of commitment of relevant actors, particularly educational leaders at various levels of the education system; and
- Resources available for the task.

However, Diagram 2 below illustrates an **indicative** timeframe, generally expressed in minimum terms and assuming that at least some pre-conditions have been met. For example, the Preparation Stage is likely to take a minimum of three months, but assumes that appropriate resources (both human and financial) are available for the range of tasks necessary to complete this stage, and that the approach taken will be professional and thorough.





Any planning that occurs needs to take account of local circumstances and should assure that timeframes are practical and achievable in the local context.

Training manual

ACTIVITY 1 Stage 1: Evidence-gathering

Objectives

- 1. To increase participants' understanding of the benefits and costs of developing a curriculum framework; and
- 2. To apply that understanding to their own contexts.

Background information and discussion

Description

This is like a 'pre-stage' in that it is a necessary precursor to the process of development. It ensures that there are clear reasons and evidence for developing a curriculum framework. Although not part of the development process itself (and therefore it is shown in Diagram 1 with 'broken' or 'dotted' outlines), its importance should not be under-estimated.

Developing a curriculum framework is normally a complex and resource-intensive process. Any initiative of this kind should be supported by validated evidence demonstrating that:

- There are significant issues in the curriculum that must be addressed; and
- The most effective way to address these issues is through a curriculum framework.

A curriculum framework is not a universal remedy for all problems in the curriculum. A curriculum framework is a specific document which can strategically address a range of real issues. However, before undertaking the development process, authorities should be certain that it is the 'best fit solution' to the identified curriculum problems.

Focus questions

The work undertaken during this stage should focus on the following questions:

- What issues or problems exist in our curriculum?
- What information and evidence do we have about the nature and extent of these issues and problems?
- What reasons do we have to believe that a curriculum framework will address these issues and problems effectively?
- What methods and tools can be used to gather data efficiently and effectively? Do we need a formal review or other evaluation activity to validate the need for a curriculum framework?
- Which regional and international experiences should we explore? Among the lessons we can learn from these experiences, which ones are relevant to our context, and which ones are not?
- Is developing and implementing a curriculum framework feasible in our context?

Main actions

The main actions undertaken during this stage should target the focus questions listed above. These could include:

- Activities designed to generate and or validate data about strengths and weaknesses of the curriculum, such as
 - stakeholder surveys,
 - consultative meetings with stakeholder groups,
 - analysis of examination results and post-school destination surveys;
- 'Alignment' analysis to determine the extent to which curriculum is consistent with national goals and with government policy in a range of areas (such as education, information technology, employment and social justice);
- Collecting and analysing curriculum policies (including curriculum frameworks) from a range of other countries, especially those in similar economic, political and social circumstances; and
- Developing a research-based position paper which presents a cost-benefit analysis of developing a curriculum framework. This paper should be the basis for making a strategic decision about developing a framework. It should therefore present to the relevant authorities (normally the Minister for Education) a clear analysis of the potential benefits of a framework (particularly how it will address identified curriculum issues) and the costs expressed in terms of the necessary funds, human resources and time.

Outcomes

The main outcome from this stage should be **a clear, informed and unequivocal commitment** across the education system (and perhaps incorporating a whole of government approach) to **developing a curriculum framework**. If a curriculum framework is to be a major curriculum innovation, it is important that the decision to proceed is supported by clear evidence and convincing supporting analysis.

Focus of the activity

This activity and the suggested tasks should help participants understand possible benefits of a curriculum framework in their own contexts, and, based on that information, make judgements about whether the development process should proceed.

TASK 1 Work in small groups

In your group, discuss the kinds of curriculum issues that a curriculum framework might address. These issues could include:

- The lack of relevance and currency in the curriculum;
- An 'overcrowded' curriculum and a lack of flexibility in curriculum design;
- The extent to which the current curriculum reflects government policy (for example, an inconsistency between government labour market policy and school curriculum orientations);
- Inconsistency within the education sector (for example, between curriculum and examinations);
- Students' achievement levels being inadequate, including unsatisfactory achievement in international tests;
- School-based issues (for example, deficiencies in commonly used teaching approaches or inadequacy of textbooks).

Based on your discussions, write down up to ten significant issues, and list them in the first column of a matrix. A template for this <u>matrix</u> ('Matrix of issues') is provided in the 'Training resources' section of this module.

TASK 2 Work in small groups

Discuss in your group the type of evidence that would demonstrate whether each of the ten is an issue in fact. For example:

- International comparative studies into relevance and currency i.e. comparing your 'home curriculum' with the curriculum of selected other countries;
- Feedback from teachers and students that they cannot 'cover the curriculum';
- Feedback from subject committees or panels that their subject needs more time in the curriculum;
- Analyses of student achievement in various assessments, including national examinations and international tests, and possible causes of unsatisfactory levels of achievement;
- Government sponsored analysis of whether the curriculum adequately reflects important government policy.

Based on your discussions, fill in the second column of the <u>matrix</u> noting 'types of evidence' that would indicate that each 'issue' is a reality.

TASK 3 Work as individual / in country teams

Either working alone or with participants from your country, consider the situation in your country and highlight up to five issues in the group matrix that are relevant to your current curriculum.

Then, consider any data or other evidence that has been collected or can be accessed to validate the exact nature of the issue and its significance. Note this evidence in the third column of the matrix³.

TASK 4 Work as individual / in country teams

Either working alone or in country teams, write some notes for an 'advice paper' about whether or not there is a need for a curriculum framework in your country. While this should be simply a series of bullet points which reflect your findings during this activity, these points could also be incorporated eventually into a ministerial briefing paper on the need for a curriculum framework.

A <u>template</u> ('Drafting a ministerial briefing paper') for this briefing paper is provided in the 'Training resources' section of this module.

TASK 5 Plenary report

As an individual or country team, report your findings (as recorded in the matrix) to all participants.

ACTIVITY 2 Stage 2: Preparation

Objectives

- 1. To increase participants' understanding of the tasks and actions involved in preparing to develop a curriculum framework;
- 2. To have participants assess the relevance of each preparatory task to their contexts and the readiness of the education system and curriculum authorities to begin the process; and
- 3. To have participants begin to understand the priorities for action that exist in their own contexts.

Background information and discussion

Description

³ It must be remembered that this activity is being conducted in a training situation, and is therefore primarily intended as a learning activity. While it might also be the beginning of a formal curriculum analysis or evaluation, it should be noted that all data must be re-assessed, expanded and validated through proper process.

Preparation is a critical and often undervalued stage in the process of developing a curriculum framework. Just as the design and planning of a building will give rise to a number of construction challenges, how those challenges will be met, how long it will take to build and the resources needed to build it, the preparation stage for developing a curriculum framework will determine how the curriculum framework will be developed, how long the development process should take, the challenges to be met during the process and the resources that will be needed.

The Preparation Stage should ensure that the development process is **well-planned**, **well-understood**, **efficient** (in terms of resource utilization and time frame) and **effective** (in terms of bringing about the desired outcome). Significant risks will arise if insufficient time and effort is not devoted to proper preparation.

Focus questions

The work undertaken during his phase should focus on the following questions:

About the curriculum framework⁴ itself:

- What will be the scope of the curriculum framework? For example, which levels of education should our curriculum framework cover? Early childhood, primary, lower secondary, upper secondary or all levels?
- What is the learning theory/philosophy which will underpin our framework?
- How adequate are our current curriculum vision, aims and objectives?
- Which values and principles will underpin the curriculum?

About the curriculum framework development process:

- What challenges will we face in developing a curriculum framework? What structures, processes and strategies will we introduce to address those challenges?
- Are the current curriculum development structures and processes appropriate for the development of a curriculum framework? If not, what changes will need to be made?
- What is a realistic timeline for developing a curriculum framework?
- What development activities (such as conceptual / capacity-building workshops, writing workshops, public meetings and stakeholder consultations) will be needed?
- What resources (human, financial, material) will be needed to develop a curriculum framework? How will the required resources be mobilized?
- What risks (financial, political, attitudinal, logistical and others) are associated with introducing a curriculum framework approach to curriculum design? How will we manage those risks?
- Who are our stakeholders? How will we involve our stakeholders in meaningful and effective ways?
- What existing education/curriculum policies, strategies and documents do we have? Which ones are fundamental references that curriculum development should comply with?

Main actions

The main actions undertaken during this stage should target the focus questions listed above. These could include:

• Developing plans

⁴ These questions are critical, but are related to the contents of a curriculum framework rather than to the process of developing a framework. They are therefore discussed in Appendix 1.

Planning is crucial to any curriculum development activity. This is especially so in developing a curriculum framework as the process will necessarily involve a broad range of actors and stakeholders.

In this context, planning should be of two broad types:

• Strategic planning

Strategic plans outline the process of developing a curriculum framework in a broad policy setting. Strategic plans should answer the question 'why have a curriculum framework?' and, in doing so, might connect the framework to broad national and government policy, and outline a clear rationale in curriculum terms. They should also provide an overview of the process of development, including the important features of the process (see Section 2, 'Important features of the curriculum framework development process', above). It should provide a broad overview of the development timeline, emphasizing crucial dates for finalizing draft documents and for providing reports to the Ministry/Government and seeking approvals.

• Operational planning

Operational plans provide more immediate guidance to the people responsible for developing the framework. In most cases, these plans will describe the tasks and activities to be completed (listed in a logical sequence), who will be responsible for those tasks and activities, a realistic timeframe for their completion and estimated for each.

It may be useful to structure the operational plan according to the various main 'lines of action' or strategies (such as strategies for communication and risk assessment – see following section, 'Developing strategies', for more detail) which need to be put in place.

A summary illustration of these plans is provided in Diagram 3.

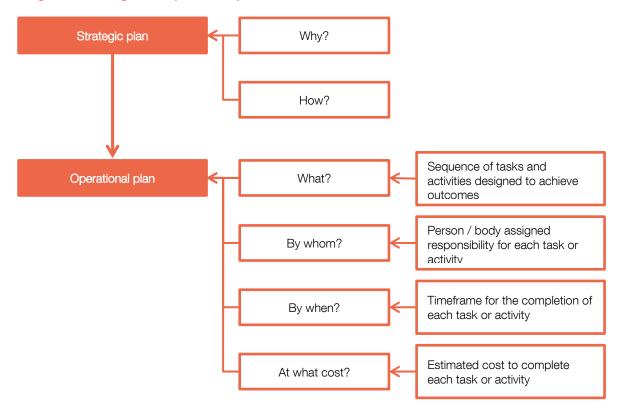


Diagram 3. Strategic and operational plans

• Developing strategies

The term 'strategies' in this context is used to mean the approaches to be taken to important components of the development process. When documented, a strategy will normally include responses to the types of questions listed under each strategy below.

It should be stressed that these need not be long and complex documents. They should be written to provide clear guidance to those responsible for developing the framework. In some ways they act as 'reminders' about important issues that need to be incorporated into the development process and for which real tasks and activities need to take place.

• Consultation strategy

A consultation strategy will describe the stakeholder groups which need to be consulted during the process, why the views of each group are important and how they should be consulted.

- Which education stakeholder groups can provide the most meaningful input to our development process?
- What key questions should we ask each stakeholder group?
- What mechanisms (forums, seminars, workshops, meetings, surveys, etc.) would be most appropriate to elicit responses from each group?
- Communication strategy

A communication strategy should describe the key messages which will need to be conveyed to stakeholder groups and to the community at large, as well as how and when those messages should be conveyed.

- Who are the key stakeholder groups with whom we need to communicate?
- What are the key messages that we need to convey?
- At what points in the process should we convey these messages?
- Through what media will we convey the messages?
- How will we determine whether these key messages are being understood?
- Technical strategy

A technical strategy should outline issues relating to defining and writing the substance or content of the curriculum framework, and how those issues will be resolved.

- Which individuals or groups have the most experience and expertise in curriculum and are most familiar with the concept of a curriculum framework?
- How will we reach agreement on the important questions about the content of the curriculum framework? (See focus questions above about the curriculum framework itself.)
- Who are the best writers of curriculum documents?
- How can we co-opt or otherwise involve these individuals in the process?
- What 'structures' (such as oversight committees, writing groups and reference groups) do we need to guarantee their effective and efficient involvement?
- What technical activities (such as conferences, strategic or planning meetings and writing workshops) do we need to conduct to achieve our outcomes?
- What assistance, if any, do we need from external agencies (such as consultancy support or study visits) to inform the development process from a technical perspective?
- Risk Assessment and Management Strategy

Risks are an inevitable part of managing curriculum change, and it is important that risks are identified early so that they can be avoided or otherwise managed. A risk assessment and management strategy should predict risks which could arise during the process, rank those risks in terms of likelihood and impact, and describe how those risks, particularly those that are most likely and which will have most negative impact, will be managed.

- What are the main risks (perhaps under headings of political, institutional, reputational, logistical and financial risks) we will face in developing a curriculum framework?
- How can we determine which of these risks could be the most damaging to the process?
- What actions can we take to minimize or otherwise manage these risks?

• Determining reporting and accountability structures and mechanisms

As in all curriculum processes, it is important that those immediately responsible for developing the curriculum framework, as well as all stakeholders, are aware of who is responsible for what, to whom they are accountable, how and when reports on progress will be provided and who is ultimately accountable for and will approve the framework.

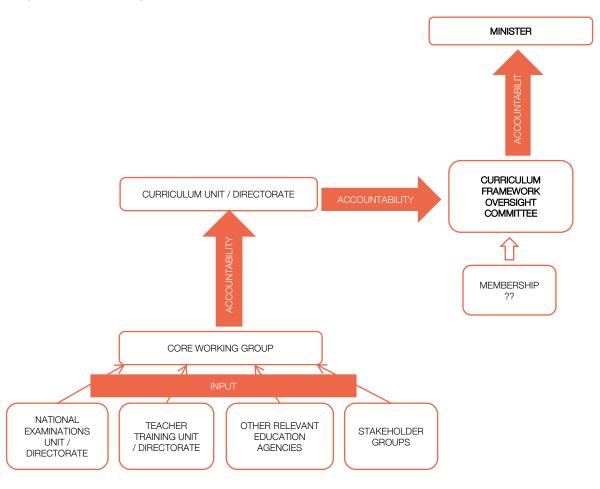
Most commonly, the actors in this process are the curriculum division or unit of the Ministry of Education, either a standing or special oversight committee and the Minister or his/her delegate. It is useful during this stage to develop an organizational chart to reflect responsibility and accountability arrangements.

The questions to be directly addressed in determining these arrangements include:

- Which body or individual will have **immediate** oversight of and responsibility for the process of developing the curriculum framework?
- Which body or individual will have **ultimate** responsibility for approving the curriculum framework in both draft and final forms?
- Do new bodies need to be created to effectively oversee the development and / or approve its outputs? If so,
 - Why is that body needed?
 - What would be their terms of reference?
 - Who would lead that body and what would be its membership?
 - At what points in the process would interim reports need to be provided and to whom?

The details of the organizational structure will vary significantly between educational contexts. Nevertheless, a suggested structure is illustrated in Diagram 4 below.

Diagram 4. Possible organizational structure



Determining the core working group

Writing a curriculum framework and conducting the processes related to its development is a task that requires time and expertise. It is not a task that normally can be performed by full-time curriculum officers in addition to existing duties.

During the Preparation Stage, the decision about who will be responsible for drafting the framework, organizing and conducting consultations, developing proposals, writing reports and briefings and all related work should be made. While this may be curriculum officers released from their normal duties, it may also include policy officers from the education ministry, university staff with specialist expertise in curriculum or other appointed national experts.

Budgeting and mobilizing resources

During the Preparatory Stage, a preliminary budget should be prepared based on the operational plans. It is important to ensure that funds are available to implement the plans and that secure funding sources are identified during this stage⁶.

Outcomes

The outcomes to be expected from the Preparation Stage include, but are not limited to:

⁶ It is important to realize that, while the curriculum framework will in all likelihood be revised and amended from time to time, its development will essentially be a 'one-off' process. For this reason, it may be appropriate to seek external or donor support to fund the proposed budget.

- Strategic plans;
- Operational plans;
- Consultation strategy;
- Communication strategy;
- Risk assessment and management strategy;
- Organizational structure (and terms of reference if appropriate) and reporting arrangements; and
- Preliminary **budget**.

Focus of the activity

This activity and the suggested tasks should help participants understand and appreciate the importance of preparing thoroughly for a curriculum framework development process, and to understand the range of tasks involved in this Preparation Stage.

TASK 1 Work in pairs

As noted in the 'Background information and discussion' section above, there are five groups of main actions to be carried out during the Preparation Stage. These are:

- Developing plans;
- Developing strategies;
- Determining reporting and accountability structures and mechanisms;
- Determining the core working group; and
- Budgeting and mobilizing resources.

Within your small group of ten participants, divide into pairs. Each pair selects one of the five groups of main actions, reads and discusses the relevant section of text from the 'Conceptual framework' section, and records a summary of what is involved in these main actions. Each pair reports their summary to the larger group. They may provide some initial observations about the extent to which the actions are relevant to their country context(s).

TASK 2 Work as individual / in country teams

Using the <u>table</u> 'Relevance and readiness', provided in the 'Training resources' section below:

- 1. Estimate how relevant each action discussed above is to your context (use the scale of 1–4 provided in Note 1 at the foot of the table). To do this, you will need to assess how suited the action is to how things are done in your context, and whether undertaking this action would be useful; and
- Estimate how 'ready' the education system and curriculum actors are to undertake each action (use the scale of 1–4 provided in Note 2 at the foot of the table). To do this, you will need to assess the capacity of the various actors, as well as any training or external support that might need to be provided.

TASK 3 Work as individual / in country teams

Based on your estimates in Task 2, make a list of the most urgent actions that need to be undertaken in order to prepare for developing a curriculum framework. These actions can then form the basis for preparing operational plans for this stage. These priority actions could each be expanded to include:

- A rationale why the action is important;
- Anticipated outcomes from undertaking the action;
- An estimated timeline for the action; and
- Resources required to undertake the action.

ACTIVITY 3 Stage 3: Development

Objectives

- 1. To increase participants' understanding of the tasks and actions involved in developing a curriculum framework;
- 2. To have participants consider a range of Government and education system policies, plans and other documents which might influence the contents of a curriculum framework; and
- 3. To have participants consider some critical questions related to the format and structure of a curriculum framework.

Background information and discussion

Description

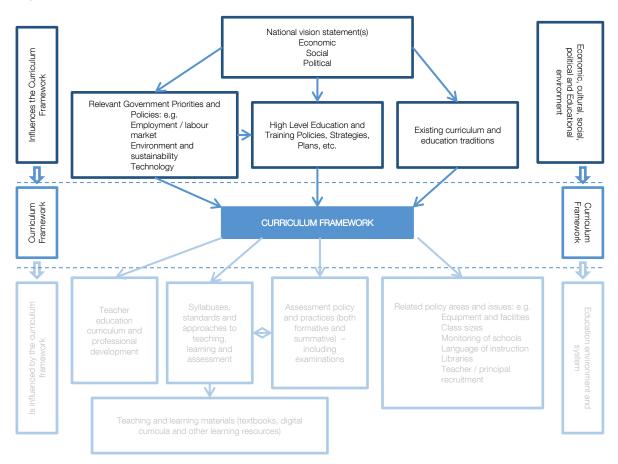
During this stage, the curriculum framework itself is developed. The process should involve a series of planned activities, such as:

- Writing workshops;
- Consultations events (such as forums, community meetings and meetings with selected stakeholder groups);
- Piloting significant ideas or proposals;
- Planned media briefings; and
- Periodic briefings to the Minister⁷.

In any context there is likely to be a range of high-level government policy and other documents that will need to be taken into account in the curriculum framework development process. These could include, for example, national vision statements, employment and labour market policies and data, higher education policy and high priority government initiatives that might exist in, for example, peace education, technology or sustainability. These 'influences' on the curriculum framework are drawn in dark blue in Diagram 5.

⁷ During this process, ministerial approval of curriculum framework proposals and other documents may be required.

Diagram 5. Influences on the curriculum framework



Focus questions

The work undertaken during his phase should focus on the following questions:

- Which important government policies and other documents need to be acknowledged and responded to in the curriculum framework?
- What format and structure of the curriculum framework would be appropriate to our context? Are they agreed to and clear?
- Are the planned development activities (such as conceptual / capacity-development workshops, writing workshops, public meetings and stakeholder consultations) focused and effective?
- Are the structures and procedures for developing and approving the curriculum framework working? Are the most appropriate people engaged in the process?
- Are resources (including human and financial) adequate and are they being used efficiently? Is supplementary funding required?
- What information should be communicated to stakeholder groups? How can we ensure that the communication clear and effective?
- What methods and tools will be most effective in developing and drafting the curriculum framework document?

Main actions

It is during the Development Stage that the curriculum framework is actually written. However, this writing process should not be the responsibility of an 'expert' or an 'expert group' in isolation, nor should its structure and contents be confined by any pre-determined formula. While an expert group would be charged with responsibility for drafting the framework and various proposals related to its structure and

contents, its work should be informed and enriched by stakeholders from across the education community.

For this reason, the following sequence of activities might be considered during a typical development stage:

- Initial national curriculum conference: conference held at the outset of the curriculum framework development process with broad government and non-government participation;
- Consultation workshops;
- Structured working sessions with a broad range of stakeholders;
- Consultation meetings with specific stakeholders;
- Intensive meetings with targeted stakeholders, such as employers;
- Writing workshops;
- Workshops involving professional curriculum writers to develop initial structure and summary of contents;
- Drafting;
- Producing drafts of the framework taking into account the feedback of stakeholders;
- Feasibility testing of proposals;
- Field testing specific proposals (such as those related to particular teaching methodologies which reflect the philosophy of the framework) in real or simulated situations;
- Concluding national curriculum conference: conference held towards end of the curriculum framework development process with broad government and non-government participation;
- Approvals; and
- Processes through which approval by the Minister or other competent authority is gained at appropriate points in the process, such as for philosophical approaches to be taken in the framework, drafts of the framework and the final version for implementation.

At the commencement of this stage, however, at least two fundamental questions need to be addressed and resolved. These questions go to the heart of the 'framework model' of curriculum, and answers to those questions will guide a number of decisions that will be made throughout the stage. The two questions are:

• What will be the 'philosophical underpinning' of the curriculum framework?

This question is about the learning philosophy at the heart of the curriculum framework, and, to some extent, about the overall student learning outcomes expected from the curriculum. While such terms as 'knowledge-based', 'competency-based' and 'standards-based' tend to over-simplify the question by implying that the terms (in this case 'knowledge', 'competency' and 'standards') are mutually exclusive when in fact they can quite logically co-exist, they are commonly used.

Before embarking on the curriculum framework development process, those responsible should have clear vision about how they wish to express the teaching and learning priorities which are at the foundation of the framework. This does not necessarily mean that one or more of these and other descriptors need to be adopted. What is important is that the vision itself is clear, and that, within that vision, the roles and importance of, in this case, knowledge, competencies and standards, is clear.

The fundamental approach to teaching and learning being adopted may be expressed in sections of the framework which deal with, for example, curriculum vision, guiding principles, values or broad learning outcomes.

This question is considered in detail in Module 3 – Curriculum Design (*Training Tools for Curriculum Development – A Resource Pack*).

• How will the content (the knowledge, skills, values and attitudes) be organized under the new curriculum framework?

One very common reason for adopting a framework approach to curriculum is to introduce more flexibility in the way learning content is organized. Traditionally, this content is organized into subjects, and most curriculum around the world would have subjects titled Language or Mother Tongue, Mathematics, Science (or individual 'sciences'), Social Sciences, History, Geography, Civic Education, Dance, Music, Physical Education, etc. In some countries, content closely related to culture (such as Islamic Studies) are also included.

A common tendency in an environment in which knowledge is expanding rapidly is for more and more content to be added to the curriculum. This often results in an overcrowded, even chaotic, curriculum in which insufficient time is available for students to learn what is expected of them. This is especially the case in those systems where all students must cover all the same content.

The development of a curriculum framework may provide the opportunity to introduce more flexibility to the curriculum, and to enrich the traditional model of subject-based organization. This is not to say that traditional subjects are not important disciplines in their own right. But it does imply that there might be better, more relevant and more realistic ways to organize content and, in doing so, make it more meaningful and relevant to students.

Ways to do this include:

- Defining content in 'broad' or 'key' learning areas rather than in subjects; for example, dance, drama, visual arts and music can be combined into a learning area called Visual and Performing Arts because their outcomes can be expressed in similar ways; similarly, history, geography and civics education could be combined into one learning are called 'social studies' or similar. This approach also affords opportunities for the teaching and learning of certain core or common content, and also for students to study particular topics in depth.
- Introducing more elective subjects, particularly in the secondary grades of school as children mature and have a greater understanding of their interests and strengths.
- Requiring that more emphasis be placed on 'cross-curriculum' activities, such as individual or group research projects in which students need to draw upon their learning in a range of subjects or disciplines.

The development of a curriculum framework also provides an opportunity to embed 'cross-subject' content into the curriculum. While subjects traditionally are viewed as 'vertical' elements of the curriculum, there is a strong trend towards acknowledging the importance of content that does not fit neatly into traditional subject paradigms – 'horizontal' curriculum elements. These include, for example, environment and sustainability (which has elements of history, geography, biology, chemistry, mathematics and other disciplines), and technology (which might contain elements of history, civic education and computing studies). The relationship between the 'vertical' and 'horizontal' elements is illustrated in Diagram 6 in which the red squares indicate possible intersections between the two.

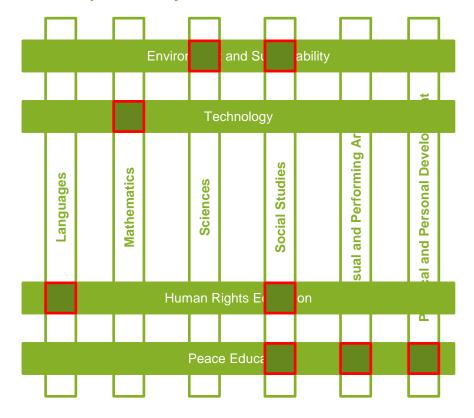


Diagram 6. The relationship between subjects and cross-curriculum content

The answers to these questions need to be formulated at the commencement of the curriculum framework development process and tested continuously as the process proceeds.

Outcomes

The outcomes to be expected from the Development Stage include, but are not limited to:

- Various drafts of the curriculum framework and a final version;
- Ownership and understanding of the framework by all education stakeholders;
- Approval of the framework by the Minister/Government.

Focus of the activity

This activity and the suggested tasks should help participants understand and appreciate the various processes and tasks involved in developing the curriculum framework.

TASK 1 Work as individual / in country teams

Either individually or in country teams, reflect on Diagram 5 ('Influences on the curriculum framework').

Using the <u>worksheet</u> 'Developing an "ideal" process worksheet', provided in the 'Training resources' section of this module, compile a list of the national statements, policies and other documents which you think should be taken into account by the developers of your national curriculum framework. For each one, write some bullet points on why and how that document should influence the framework.

Share your observations with other participants in a plenary session.

TASK 2 Work as individual / in country teams

How effective is curriculum development currently in your context? Using the <u>table</u> 'Rating the effectiveness of current curriculum development processes', provided in the 'Training resources' section of this module, rate how effectively the various functions are currently carried out in your context. Then, below the table, make some notes about how you would improve current processes.

TASK 3 Work in small groups

Reflect on and discuss with your group the list of Main Actions (above) that could be undertaken during this Stage. Use the <u>worksheet</u> 'Developing an "ideal" process worksheet', provided in the 'Training resources' section of this module to formulate, as a group, an 'ideal' action plan for developing a curriculum framework. It is not important during this task to agree on every point, but it is important to consider the nature and purpose of each action and to reach some general consensus about its usefulness and about how it could be included in a process.

To develop the 'ideal' process, complete Column 3 (purpose of the activity), Column 4 (target audience) and Column 5 (duration).

Note that you may put the actions in whichever order you wish by noting their sequence in Column 1. You may also wish to add different activities in Column 2.

ACTIVITY 4 Stage 4: Implementation

Objectives

- 1. To encourage discussion about what 'supporting implementation of a curriculum framework' means; and
- 2. To have participants consider the ways in which the curriculum framework can be supported during the implementation stage.

Background information and discussion

Description

During this stage, the curriculum framework is implemented across the education system. Because the framework will have implications for both policy (in education and perhaps other areas of government) and practice (including, for example, syllabus / standards review and revision, changes to teaching and assessment practice, review of public examinations and new requirements for textbooks), there would normally be demands made on the developers of the framework to provide support for this implementation.

During this stage, the extent to which the requirements of the framework are practical and achievable should be continuously monitored.

Diagram 7 below illustrates the range of agencies and educational functions (those outlined in dark blue) which will most likely be influenced in some way by the curriculum framework. This diagram also illustrates some inter-relationships between some of these areas, such as how syllabuses determine textbook content and standards, and how assessment policy and practice is both influenced by but can also influence syllabuses. What is important to note is that all areas will be influenced to some extent by the contents and requirements of the curriculum framework.

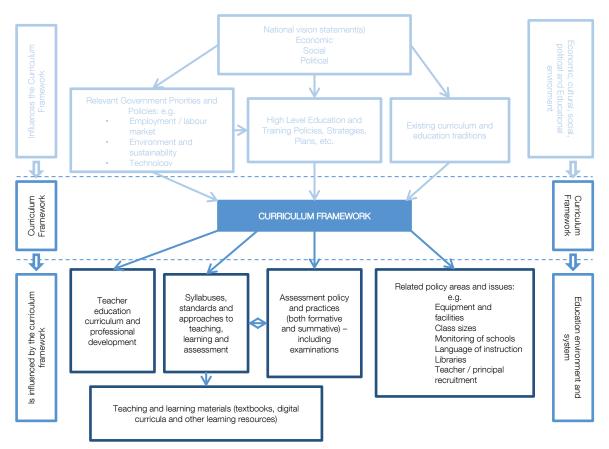


Diagram 7. Areas of policy and practice influenced by the curriculum framework

Focus questions

The work undertaken during his phase should focus on the following questions:

- Do all relevant areas of the education system understand the curriculum framework and its implications for them?
- What plans are in place for each of the areas to implement the framework?
- What level of resources available (both financial and human) to implement the framework?
- What structures (such as committees, working groups and authorized individuals) would be most effective to oversee and co-ordinate the implementation of the framework?
- What methods and tools can be used to support implementation?

Tasks and actions

The tasks and actions in this stage focus on supporting the implementation of the framework across the education system, particularly those mentioned in Diagram 7. These would most likely be the responsibility of a specially appointed implementation oversight group (often selected from the curriculum unit or directorate), and could include:

Implementation plans

While each area of the system should develop its own plan, it is often advisable for the group responsible for overseeing the implementation request a copy of these plans and consolidate them into a comprehensive, system-wide implementation strategy and plan. These plans should be practical and achievable, costed and funded, and have realistic timelines.

Discussion and advice papers

It may be helpful for the oversight group to develop a series of brief, practical documents which describe the possible influence of the curriculum framework on individual areas or stakeholder groups, and which describe potential responses to the framework's requirements.

• Brochures or posters

Brochures and posters are excellent media for summarizing the main features of the curriculum framework to specific audiences. For example,

- A poster outlining the key messages for teachers could be distributed for display in the staff areas of all schools;
- A brochure describing the changes to how students might be expected to learn and describing/illustrating new classroom dynamics might be distributed to parents; and
- A brochure outlining how the framework will result in a more competent, work-ready school graduates (if this is a priority of the framework) could be distributed to employers.

Conferences and other teacher in-service training programs

• Seminars and forums

Information seminars and forums could be targeted to such groups as:

- Employers and community groups (such as religious and tribal leaders);
- Subject panels;
- Textbook writers; and
- Teacher trainers.

• Meetings of implementation working groups

It is possible that a range of agencies and ministries whose work is influenced by the framework will benefit from on-going support throughout the implementation period.

Particular attention may need to be given during this stage to assessment policy and practice, including to the national examinations system. Curriculum frameworks often impose very challenging requirements on assessment policy, and can require teachers to make significant changes, both conceptual and practical, to how they conduct assessments in the classroom.

Similarly, the underlying philosophy and principles of the framework must be reflected in the examination system. Non- or only partial alignment of the curriculum with assessment practice can cause significant confusion among teachers and students. Achieving this alignment should be a very high priority for this implementation stage.

Outcomes

The main outcome of this stage should be a **full implementation of the curriculum framework**. It is likely that full implementation, particularly the necessary revisions of subject syllabuses or standards and textbooks will take several years. It is important that this process be supported in a sustained way.

Focus of the activity

This activity and the suggested tasks should help participants understand and appreciate the various processes and tasks involved in implementing the curriculum framework.

TASK 1 Work in small groups

In your groups, discuss the question 'What does "implementing a curriculum framework" mean?'

Remember, 'implementing a curriculum framework' is not the same as 'implementing curriculum'. Implementing curriculum normally involves applying syllabus requirements in classrooms, whereas implementing a curriculum framework has broader, systemic implications.

After your discussions, draft a statement of up to 25 words commencing with the words 'Implementing a curriculum framework means ...'.

Share your statements in a plenary session and discuss the main implications of the statements as a large group.

TASK 2 Work in small groups

Following the plenary session in Task 1, re-form into small groups.

Use the <u>worksheet</u> 'Implications of a curriculum framework worksheet', provided in the 'Training resources' section of this module to complete the following sub-tasks:

- 1. In Column 1 of the table, write a list of the agencies, units, departments, ministries, etc. whose work might be affected by the introduction of a curriculum framework. In completing this task, you may wish to refer to Diagram 7 which is reproduced in the worksheet.
- 2. In Column 2 of the table, write some bullet points to describe **how** their work might be affected by the introduction of a curriculum framework.
- 3. In Column 3, summarize the kinds of support activities that might need to be provided to each of the units, agencies, etc.

An example of each of these has been provided in the table.

ACTIVITY 5 Stage 5: Monitoring and evaluation

Objectives

- 1. To have participants think about monitoring and evaluation of process as integral elements of all curriculum work; and
- 2. To have participants begin to consider some ways of collecting data about the strengths and weaknesses of the curriculum framework development process.

Background information and discussion

Description

The focus in this stage is on monitoring and evaluating the development and implementation process. In other words, the emphasis here is not on whether or not the framework itself is successful (that is, whether, for example, learning outcomes improve), but on whether or not the various processes used to develop and implement the framework were efficient and effective.

However, it is likely that some information will also be gathered about the quality of the framework itself, some of which could indicate the need for the framework to be amended in some way. This is represented in Diagram 1 by the arrow leading back to Stage 2.

Focus questions

The work undertaken during his Stage should focus on the following questions:

- How will we know whether the **process** of developing the curriculum framework has been successful? What criteria will we use and what data do we need?
- How will we know if our curriculum framework has improved learning outcomes for our students? What criteria will we use? What instruments or data-sources will be necessary? Will they be similar to those used in Stage 1 (Evidence-gathering)?
- How will we address challenges and issues that become apparent during the implementation stage? How will our evaluation inform our preparation to revise the curriculum framework? In what timeframe should this occur?
- What methods and tools can be used to monitor and evaluate the process of developing the framework?

Tasks and actions

As in other stages, a number of tasks and actions can be identified to be completed during this stage. These include:

- Establish a set of criteria that will allow judgements to be made about the framework development process;
- Gather information about the process by, for example,
 - Distributing surveys to stakeholders which gauge the satisfaction they felt with their involvement;
 - Analysing the effectiveness of planning, budgeting and timelines;
 - Collecting data about how often core group members were asked to participate in information seminars and other support activities; and

- Analysing this data in the context of efficiency and effectiveness of the process.
- Write a brief report about the process which could inform future development activities.

The work in Stage 5 should seek to address such issues as:

- Whether or not the set of data and evidence gathered in Stage 1 is sufficient to justify the development of a framework, and what other data might have been useful;
- How effective the planning process was and the extent to which the strategic and operational plans guided the development process;
- Whether or not resources were adequate for the development process;
- How successful the budgeting process was;
- How accurate the originally estimated timelines were, and what strategies were employed to accommodate extensions to timelines as required;
- How effectively stakeholders were (a) informed about and (b) engaged in the process;
- The lessons learned from the development process that could inform other curriculum development processes and methodologies in the future.

While 'Monitoring and Evaluation' is represented in Diagram 1 as a separate Stage, **monitoring** the process should be continuous. Monitoring should be viewed as a professional requirement which focuses on the effectiveness and efficiency of work undertaken in every Stage.

Outcomes

The main outcome of this stage should be an evidence-based report which:

- Analyses the strengths and weaknesses of the development and implementation process; and
- Makes recommendations about how lessons learned from the process might be applied to other curriculum development processes. These could be about, for example:
 - The relevance and importance of planning in the particular country context;
 - The benefits of engaging stakeholders and various strategies for achieving this;
 - Factors to be taken into account in estimating timelines and resources required for the development and implementation process; and
 - Strategies for communicating the philosophy and content of new curriculum products to a range of audiences.

Focus of the activity

This activity and the suggested tasks should help participants understand and appreciate the importance of monitoring and evaluation of the development process, and to use the results to inform future curriculum development processes.

TASK 1 Individual reflection and recording

As noted in the discussion of Stage 5 (above), a brief report on the development process can be a useful way to record the reaction of stakeholders and to record the strengths and weaknesses as a reference for future curriculum development processes.

A simple structure for such a report could be as outlined in the <u>template</u> 'Simple structure for a process evaluation report', provided in the 'Training resources' section of this module.

In your groups, discuss why evaluating the curriculum framework development process is important. Then, working individually, write a brief rationale for the report, summarizing why it is an important document.

TASK 2 Work in small groups

One way of evaluating the success of the curriculum framework development process is to survey those involved. Working in small groups, select three stakeholder groups from the list below, and devise up to three questions that could be asked of each group to evaluate the process used to develop the curriculum framework.

- Students and their families;
- Teachers;
- School leaders;
- School inspectors;
- Teacher training systems and institutes;
- Textbook writers and publishing companies;
- Higher education systems and institutions (universities, vocational and technical colleges and others);
- Employers and relevant industries;
- Societal leaders (such as tribal elders, church leaders and other community leaders); and
- Relevant government agencies.

Training resources

Matrix of issues (Activity 1, Task 1)

Curriculum issue	Type of evidence	Actual feedback in your context
E.g. Overcrowded and inflexible curriculum	E.g. Feedback from teachers and students	 E.g. Reports from school inspectors Feedback from teachers' union Letters of complaint from students and parents

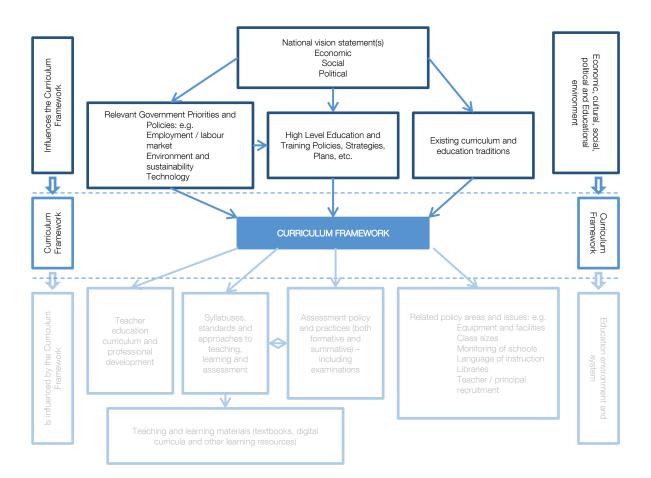
Drafting a ministerial briefing paper (Activity 1, Task 4)

Part	Focus of this Part	Notes
A	What is a curriculum framework ?	•
в	Curriculum issues and challenges in our country context (including evidence that these issues and challenges exist).	•
с	The advantages of a curriculum framework in our context.	
D	The costs and possible risks of developing and implementing a curriculum framework in our context;	
E	Recommendation (about whether or not to develop and implement a curriculum framework).	Based on the evidence and information provided above, it is recommended that

Relevance and readiness (Activity 2, Task 2)

Group	Action		Relevance Scale 1-4 (see Note 1)	Readiness Scale 1-4 (See Note 2)
Developing plans	Develop strategic plans			
	Develop operational plans			
	Develop consultation strategy			
	Develop communication strategy			
Developing strategies	Develop technical strategy			
	Develop risk assessment and management strategy			
Determining reporting and	Form oversight committee or authorize existing committee			
accountability structures and mechanisms	Develop an organizational structure / chart			
Determining core working	Decide on and approve membership			
group	Write terms of reference and have them approved			
Budgeting and mobilizing	Develop preliminary budget			
resources	Identify and secure resources to develop framework			
Note 1: Relevance refers to whether or not undertaking thaction will be useful and appropriate to yo context. 1 = Completely irrelevant 2 = Not very relevant 3 = Quite relevant 4 = Extremely relevant				

Influences on the curriculum framework (Activity 3, Task 1)



Government statement, policy or other documents	Why or how this document should influence the curriculum framework
e.g. National Labour Market Policy and Targets	 Important because it nominates areas of labour market growth and skills shortages; Curriculum Framework should direct the development of technical and vocational courses in these areas; Curriculum Framework should identify work-related key competencies and require that they be incorporated in mainstream subjects.

Rating the effectiveness of current curriculum development processes (Activity 3, Task 2)

Function	Description	Your rating (see note below)
Oversight	Supervising the process and those responsible for it. Effectiveness of oversight committee or officer in ensuring plans are followed, and progress is reported.	
Management	The day-to-day management of operations. Ensuring that activities in each Stage occur in a timely manner, are conducted within budget and timeframes, and deliver the required outcomes.	
Drafting	Writing the text of the curriculum framework in both draft form and final text. Includes responding to feedback to improve both ideas and their expression.	
Consultation Informing and listening to stakeholder groups. Seekin meaningful and effective ways, and responding to tha feedback as appropriate.		

Rating of curriculum development functions as they are currently carried out in your context:

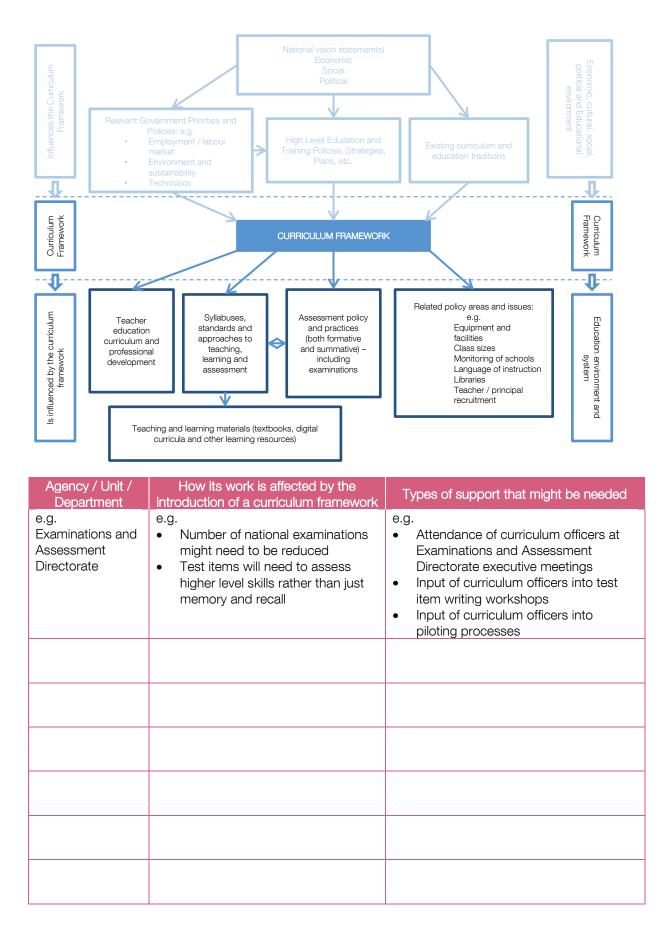
- 1 = Very ineffective
- 2 = Ineffective
- 3 = Neither ineffective or effective
- 4 = Effective
- 5 = Very effective

Based on these ratings, what would you do to improve curriculum development processes?

Developing an 'ideal' process worksheet (Activity 3, Task 3)

1. Seq	2. Main Activity	3. What are the purposes of the activity?	4. Who should be involved in the activity?	5. How long or how often should this activity occur?
	National curriculum conference 1			
	Consultation Workshops			
	Consultation meetings with specific stakeholders			
	Writing workshops			
	Drafting			
	Feasibility testing of proposals			
	National curriculum conference 2			
	Approvals			

Implications of a curriculum framework worksheet (Activity 4, Task 2)



Simple structure for a process evaluation report (Activity 5, Task 1)

PART A: Rationale

- PART B: The five stages of the curriculum framework development process
- PART C: Evaluation of the process
 - C.1: Sources of evaluation data
 - C.2: Results of the evaluation (particularly strengths and weaknesses of the process)
- PART D: Recommendations regarding future curriculum development

Additional resources

1. Links to curriculum frameworks

When looking for examples of curriculum frameworks, it is important to remember that not all countries use the term 'curriculum framework'. This is not to say that those countries do not have a document or statement which performs some of the same functions as a curriculum framework. This in itself indicates the important notion that the primary purpose of such a document is to achieve some specific outcomes, not simply to 'have' a curriculum framework.

Some examples of frameworks:

Namibia: <u>http://www.nied.edu.na/publications/nieddocs/National%20Curriculum%20for%20Basic%20Ed</u> <u>ucation%20Jan10.pdf</u>

Singapore: http://www.moe.gov.sg/education/

Finland: http://www.oph.fi/english/curricula and qualifications/basic_education

Australia: http://www.australiancurriculum.edu.au/

New South Wales (NSW) – one state of the Commonwealth of Australia: http://www.boardofstudies.nsw.edu.au/manuals/pdf_doc/curriculum_fw_K10.pdf

2. Links to curriculum development process examples

While many curriculum frameworks are available on the internet, **it is difficult to find published examples or case studies of curriculum framework development processes**. However, reference to the following examples of curriculum processes may be helpful.

The website of the Australian Curriculum, Assessment and Reporting Agency (ACARA) does provide the following explanation of how curriculum documents (not specifically a curriculum framework) are to be developed⁸:

- 7. The process for developing the Australian Curriculum has been designed to generate broad engagement with, and discussion and feedback about, the shape and content of the Australian Curriculum.
- 8. The curriculum development process involves four interrelated phases:
 - curriculum shaping
 - curriculum writing
 - preparation for implementation
 - curriculum monitoring, evaluation and review.
- 9. The curriculum shaping phase produces a broad outline of the Foundation to Year 12 (F–12) curriculum for a learning area1, firstly as an initial advice paper and then as the shape of the Australian Curriculum: <Learning Area>. This paper, developed with expert advice, provides broad direction on the purpose, structure and organisation of the learning area. Along with the Curriculum Design paper, it is intended to guide writers of the curriculum. It also provides a reference for judging the quality of the final curriculum documents for the learning area. This phase includes key periods of consultation open public consultation as well as targeted consultation with key stakeholders including teachers

⁸ <u>http://www.acara.edu.au/verve/ resources/ACARA Curriculum Development Process Version 6.0 - 04 April 2012 -</u> _FINAL_COPY.pdf

and schools, state and territory education authorities, parents and students, professional associations, teacher unions, universities and industry and community groups.

- 10. The **curriculum writing** phase produces an Australian Curriculum for a particular learning area, that is, specifications of content and achievement standards to be used by education authorities, schools and teachers in all states and territories. This phase involves teams of writers, supported by expert advisory groups, and includes key periods of consultation open public consultation as well as targeted consultation with key stakeholders including teachers and schools (through intensive engagement activities), state and territory education authorities, parents and students, professional associations, teacher unions, universities and industry and community groups. The writing phase incorporates the process for validation of achievement standards and culminates in publication of the Australian Curriculum for the learning area.
- 11. The **preparation for implementation** phase involves delivery of the curriculum to school authorities and to schools in an online environment in time for school authorities, schools and teachers to prepare for implementation. Implementation and implementation support are the responsibility of state and territory school and curriculum authorities.

ACARA works with state and territory curriculum and school authorities to support their ongoing implementation planning by providing briefings, introductory information materials and national facilitation for planning.

12. The curriculum monitoring, evaluation and review of the Foundation to Year 10

Australian Curriculum will be ongoing, with annual reports to the ACARA Board detailing any issues identified. Analysis of the issues and any recommended actions, including any that might include further investigation, will be included. Monitoring will be coordinated by ACARA and, where relevant data gathering is required, will include partnerships with state and territory curriculum and school authorities. This might include data about areas for which teachers require ongoing support in order to teach the curriculum. Specific monitoring mechanisms will be negotiated with state and territory curriculum and school adate about the Australian Curriculum. ACARA will provide a monitoring framework, including research questions and associated data gathering, which can be used by state and territory education authorities as part of their own monitoring strategies, to assist in their collection and provision of state and territory data about the Australian Curriculum to ACARA. The evaluation process may result in minor changes to, or a revision of, the curriculum.

The development of syllabuses (note that this does not necessarily apply to the development of a curriculum framework) in the state of NSW by the curriculum authority (the 'Board of Studies') follows the following process⁹:

The Board of Studies is committed to a syllabus development process that provides opportunities for consultation, establishes achievable timelines and ensures quality syllabuses.

The process, using a project management approach, involves four phases:

- 1. Syllabus review
- 2. Writing brief development
- 3. Syllabus development
- 4. Implementation.

The process is described on the following pages.

Major features of the process are:

⁹ <u>http://www.boardofstudies.nsw.edu.au/manuals/pdf_doc/syl_dev_process.pdf</u>

- Advice is sought at key points from teachers, significant individuals and organisations. In particular, professional teacher associations play an important role.
- The Board appoints Board Curriculum Committees to assist with its monitoring and quality assurance role. These committees report directly to the Board on the quality of the material produced by project teams and ensure the integrity of the syllabus development process.
- A project manager employed by the Office of the Board of Studies manages the syllabus development project, developing the initial proposal, establishing consultative networks, managing consultation, and drafting and revising syllabus documentation. Project teams will, at various stages of the syllabus development process, include curriculum, assessment and publications officers.
- Contracted writers are, at times, also included in the project teams. The Board maintains a register of writers. To be considered for appointment as writers, teachers from all syllabus areas with demonstrated writing expertise can submit an expression of interest to the Office of the Board. Advertisements for expressions of interest appear from time to time in Board Bulletins. Enquiries can be made to the Director of Curriculum, tel: (02) 9367 8315.

Appendix: Critical issues relating to the contents of a curriculum framework

As mentioned in the Conceptual Framework, developing a curriculum framework is not an end in itself. Rather, it is one means of enhancing curriculum (by, for example, making it more flexible or consistent) and solving curriculum related issues and challenges. For this reason, there is no single scope, format or structure of a curriculum framework – these must be decided by authorities responsible for developing the framework.

In all contexts, however, developing a curriculum framework requires numerous decisions. These range from high level policy decisions (such as the levels of school curriculum which the framework will cover – the scope) to very practical decisions (for example, the layout and font of the document). All these need to be resolved during the development process.

Some of the more significant, high level questions to be considered during the development process are discussed briefly below.

1. What will be the scope of the curriculum framework?

Because national curriculum frameworks most often seek to make curriculum documents and their implementation more consistent, consideration should be given to including all levels of schooling in the framework's scope. This will guarantee, as much as possible, that students have a consistent learning experience throughout their school lives. For example,

- There will be a single set of values and principles underpinning the curriculum;
- There will be one set of beliefs about teaching, learning and assessment operating in their classrooms;
- There will be a high level of sequence and continuity in the content of their learning, including in the competencies they are expected to develop; and
- There will be a consistent level of quality in the textbooks and other learning materials.

There may be circumstances in which the curriculum framework applies to, for example, primary curriculum only. These may include that there is no early childhood curriculum, or only primary schooling is compulsory or that secondary curriculum is adapted from another system. Even in these cases, however, developers of the framework should carefully consider the risks (such as inconsistency and 'dislocation' of learning processes and the perception that the curriculum vision and principles are important for one level of schooling but not another) of not including all levels of school curriculum in the scope of the framework.

2. What is the learning theory and philosophy which will underpin our framework?

One very common reason for developing a curriculum framework is to change current practices in teaching and assessment, which are often seen as far too teacher-centred and didactic. In order to alter these practices, however, the framework must adopt a clear and well-articulated 'alternative' – that is, a 'new' set of principles about teaching and learning that reflects respected pedagogical theory and philosophy. Very often, frameworks focus on phrases such as 'learner-centred' or activity-based' to describe this new approach.

However, as it is explained in the framework, it must be an approach which has been well-considered in the particular context of the country (for example, it must be affordable in terms of teacher education and resources to support it), and it must be clearly explained to teachers and other stakeholders.

As a first step, those responsible for answering this important question should be familiar with the general learning theories contained in the table¹⁰ below.

Theory	Summary	Originators and important contributors	
Behaviourism	Behaviourism is a worldview that operates on a principle of 'stimulus- response.' All behaviour caused by external stimuli (operant conditioning). All behaviour can be explained without the need to consider internal mental states or consciousness.	 John B. Watson Ivan Pavlov B.F. Skinner E. L. Thorndike (connectionism) Bandura Tolman (moving toward cognitivism) 	
Cognitivism	The cognitivist paradigm essentially argues that the 'black box' of the mind should be opened and understood. The learner is viewed as an information processor (like a computer).	 Merrill -Component Display Theory (CDT) Reigeluth (Elaboration Theory) Gagne Briggs Wager Bruner (moving toward cognitive constructivism) Schank (scripts) Scandura (structural learning) 	
Constructivism	Constructivism as a paradigm or worldview posits that learning is an active, constructive process. The learner is an information constructor. People actively construct or create their own subjective representations of objective reality. New information is linked to prior knowledge, thus mental representations are subjective.	 Vygotsky Piaget Dewey Vico Rorty Bruner 	
Design-Based	Design-Based Research is a lens or set of analytical techniques that balances the positivist and interpretivist paradigms and attempts to bridge theory and practice in education. A blend of empirical educational research with the theory-driven design of learning environments, DBR is an important methodology for understanding how, when, and why educational innovations work in practice; DBR methods aim to uncover the relationships between educational theory, designed artefact, and practice.	 A. Brown (1992) A. Collins (1992) DBR Collective and others 	

¹⁰ Adapted from <u>http://www.learning-theories.com</u>

Humanism	Humanism is a paradigm/philosophy/pedagogical approach that believes learning is viewed as a personal act to fulfil one's potential	• Abraham Maslow • Carl Rogers • Malcolm Knowles
Miscellaneous	Multiple intelligences Gardner's work in defining nine intelligences (verbal-linguistic, logical- mathematical, spatial-visual, bodily- kinesthetic, musical, interpersonal, intrapersonal, naturalistic and existential) has significant implications for curriculum which seeks to acknowledge individual differences and a range of learning styles.	• Howard Gardner

3. How adequate are our current curriculum vision, aims and objectives? Should they be revised as part of the development process?

Another fundamental question related to the content of a curriculum framework is whether or not the current vision (explicit or implied), aims and objectives are adequate. If the answer is 'no', then these need to be discussed and defined early in the curriculum framework development process because they will guide and, in some ways, define much of the content of the framework itself.

4. Which values and principles will underpin the curriculum?

During the development process, authorities often seek to ensure that certain values are embedded in the curriculum. In other words, they identify a set of values that underpin teaching and learning. These often reflect 'national' or 'social' values as expressed in other relevant documents, and might include such phrases as

- Tolerance and respect for difference,
- Commitment to national heritage and culture,
- Endeavouring to do one's best, and
- Acknowledging and respecting personal rights.

Similarly, developing a curriculum framework provides the opportunity to enhance consistency and relevance in the curriculum, which can be achieved in part by ensuring that the principles underpinning the curriculum are clear. These could include principles related to

- Teaching and learning (such as recognizing and building on individual capabilities and a focus on competency),
- Assessment,
- Balance, flexibility and relevance in content.
- Commitment to ongoing support for teachers and schools in implementing the framework, and
- Constructive evaluation and monitoring of the framework.