

## How to Make IAs More Collaborative

### 9.1 HIGHLIGHTS

In Chapters 8 and 9 we pose two choices concerning how IAs might become more democratic. The first choice, delegating or sharing decision-making authority with the public, is addressed in Chapter 8. This chapter is concerned with the second choice, taking steps to ensure that the public is an active and ongoing participant in a collaborative IA process. Final decision-making authority, however, continues to reside with the proponent and/or with the regulators.

Collaboration is defined broadly to encompass all forms of public participation short of delegation or shared decision making. Collaboration implies a joint endeavor of the public and of other “stakeholders.” Therefore, forms of public participation, not fully collaborative, are included in the analysis but as prerequisites to or subsets of a collaborative IA process. Nonparticipation, either warranted or not warranted, is not considered. Also not addressed, except in the sense of dangers to guard against, is illegitimate participation (e.g., deliberately incomprehensible, insincere, untruthful) (Forester, 1989). The differences between collaborative and democratic IA processes are largely a question of degree. Both processes seek to enhance the role and influence of the public in decision making.

- The analysis begins in Section 9.2 with three applied anecdotes. The stories describe applied experiences associated with efforts to make IA practice more collaborative.
- The analysis in Section 9.3 then defines the problem, which is the gulf between the potential benefits of collaborative IA processes and the more modest benefits achieved by public participation approaches commonly evident in IA requirements and practices. The direction is exploring the potential for and means of making IA processes more collaborative.
- In Section 9.4 we first consider the possibility that valid and significant disadvantages and constraints largely preclude a collaborative IA approach to public participation. This explanation, although partially valid, is found wanting. The second possibility is that there is an extensive foundation of sound analysis and good

practice, which could provide the basis for collaborative IA processes. But the relevant source materials are immense, of varying quality, and scattered across numerous related fields. What is required is a succinct presentation and analysis of the major “building blocks” of a collaborative IA process. Major distinctions drawn in the analysis include (1) principles and practices, (2) consultation, (3) communications, (4) mutual education, (5) negotiations, and (6) collaboration.

- In Section 9.5 we apply the insights, distinctions, and lessons identified in Section 9.4. We describe the properties of a collaborative IA process at both the regulatory and applied levels. In Section 9.5.1 we explore how IA requirements could facilitate collaborative IA practice. In Section 9.5.2 we demonstrate how a collaborative IA process could be expressed at the applied level. In Section 9.5.3 we illustrate how a collaborative IA process could be expressed for various IA types.
- In Section 9.6 we address the contemporary challenge of IA capacity building. We identify key conceptual distinctions and offer good practice guidance.
- In Section 9.7 we highlight the major insights and lessons derived from the analysis.

### 9.2 INSIGHTS FROM PRACTICE

#### 9.2.1 Collaboration and Technical Expertise Do Not Always Achieve Everyone’s Idea of Sustainability

Sustainability appraisal was introduced by the government in 2004 to apply to regional and local spatial plans in England. It is a process, whereby emerging plans are compared against a sustainability framework comprising criteria selected, based on locally relevant issues, and tested through indicators. As such, it attempts to predict the consequences of various draft policies, leading to the selection of preferred policies based on the consideration of sustainability outcomes. Its effectiveness, however, is highly contested because of the value-based nature of the assumed goal (sustainable development), because effectiveness can be viewed through different theoretical framings, and because good governance does not guarantee sustainable outcomes

(a more detailed explanation can be found in Bond et al., 2011). In practice, sustainability appraisal is typically conducted by consultants (paid by authorities) who develop the framework, the authorities consult on it, and then the consultants apply it behind closed doors.

A research study in England examined the implications of large-scale land-use change through focusing on the potential for large increases in land area for biomass crops such as *Miscanthus* and Willow. As part of the research process, sustainability appraisal was undertaken in the South West and East Midlands regions of England to examine these implications; the results highlighted potential solutions for the three issues highlighted above, and these are considered, in turn, below.

The normative nature of sustainable development has been recognized as a confounding factor when attempting to achieve consensus on future planning. It is argued that the many interpretations of sustainability make legitimization of any decisions difficult. Research undertaken on sustainability appraisal of land-use plans in England has suggested that it favors socioeconomic benefits at the expense of the environment. It is further suggested that this is inevitable, given that the plan-making process inherently involves trade-offs that are likely to lead to interpretations of sustainability in which the environment loses out (weak sustainability). In the research project, affected stakeholders were brought together in order to develop the sustainability appraisal framework, and they acknowledged the inevitability of detrimental trade-offs at the decision stage. This possibility was mitigated through the use of constraint mapping, whereby areas of critical natural capital (as defined by the stakeholders) were excluded from the appraisal process (and from the possibility of future planning), rendering subsequent trade-offs environmentally benign.

Historically, assessment processes were based on the theory of rational choice, whereby decision makers would make better decisions, given better information. However, the effectiveness of decision making can be viewed through different theoretical framings and few people argue that decision making is entirely rational, with arguments made that assessment processes have different roles in decision making, ranging from imposing institutional values on the decisions, through to being purely symbolic to give the impression of rationality where none exists. Recently, more arguments are being made that powerful actors in the process manage to subvert assessment processes to reach particular conclusions. The research acknowledged these different theories associated with effectiveness of sustainability appraisal and addressed them through embedding greater pluralism in the process, both in terms of framing the sustainability appraisal itself (through its objectives and indicators), and through the interpretation of the results. This demanded considerably more consultation than is the norm for such appraisals, with at least two workshops to define and refine the sustainability framework.

Based on the Commission of the European Communities, definition of “good governance” as being underpinned by

five principles—openness, participation, accountability, effectiveness, and coherence—it can be argued that uninformed democracy is likely to lead to more unsustainable outcomes, whereas expert-led decision making is likely to lack legitimacy. The argument is simply that a lack of comprehensive understanding of natural systems by laypersons makes it somewhat difficult to agree on solutions that benefit, rather than negatively impact, the environment. A solution proposed, coming out of the research study, was to undertake more analytic-deliberative sustainability appraisal, whereby affected stakeholders had the opportunity to work with experts to set the sustainability appraisal framework (in the defining and refining workshops mentioned above). However, an interesting finding was that national stakeholders, who were involved because of their legal responsibilities, covering areas like water quality, heritage, and nature conservation, typically failed to apply a local understanding (or if they had local understanding, it was blanked out by the institutional line), which made it more difficult to generate an appraisal framework specific to a geographical area. A particularly revealing feature of the work was that the affected local stakeholders were unwilling to walk away from the process after the framework was agreed, arguing that only people with a local understanding and a stake in the sustainability of an area could properly interpret the results of a sustainability appraisal and, most importantly, agree on trade-offs. This led to follow-up meetings to allow affected stakeholders to be involved in the application of the framework rather than have it take place behind closed doors. Such engagement with locally affected stakeholders helps to embed ecosystem services in the appraisal, given that those people who use and value those services are involved with the appraisal.

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### 9.2.2 Active Stakeholder Support for an Effective EIA Process

There is an old adage in EIA circles, especially held by regulators, to the effect that “a good EIA process is one in which all of the stakeholders are little unhappy.” If the proponent is a little unhappy, it likely means that while they have received an approval for their proposal, they are being required to implement more rigorous or demanding mitigation and follow-up measures than they would prefer. And if an environmental group is a little unhappy, it likely means that their concerns have been listened to and at least partially met, although the approved mitigation measures have not gone as far as they would like them to (or, of course, the proposal has not been rejected outright as they might wish were the case). Where EIA stakeholders are extremely happy or extremely unhappy, respectively, it probably spells trouble for regulators and/or the environment. Thus the aim

is to keep everyone equally engaged, albeit in a slightly disgruntled state. This has seemingly long been the ambition of EIA regulators in Western Australia, as it was from a senior staffer within the Office of the Environmental Protection Authority (EPA) that we first heard this adage many years ago. We have since heard EIA regulators from other countries express a similar sentiment on this matter.

Perhaps an even better test of a good EIA process though is one that all stakeholders actively defend. We have witnessed this in recent years during meetings of the Stakeholder Reference Group (SRG) that was established to provide advice to the Western Australian EPA on a review of EIA that commenced in 2009. Membership of the SRG includes various government agencies (e.g., health, planning, mines and petroleum, local government), peak industry group representatives (e.g., mining, petroleum, land development, environmental consultants association), and environmental groups. While it might be expected that there could be friction or even hostility between some of these groups, not to mention each having its own agenda for seeking changes to EIA that might especially benefit their own sector, we have witnessed a high level of cooperation overall and a sense of working for the greater common good. Furthermore, at times, the SRG members have explicitly sought to strengthen or improve the EIA process or the EPA's capacity to implement EIA in Western Australia. An example of the latter was an offer for industry and consultants to assist with the preparation of EIA guidance materials in light of serious staff and capacity shortages experienced by the EPA. The industry and conservation groups alike realized that a weak EPA, and by extension a weakened EIA process, would actually be counter to their interests even coming as they often are from opposite ends of the "green spectrum."

A good EIA system appears to be highly valued by industry, especially because of the financial ramifications that ensue. Getting a recommendation of approval from the EPA is good for business with company share prices often going up in immediate response (and the converse is also the case). An EPA nod of approval (with subsequent endorsement by the Ministry of Environment) also seems to be imperative for ventures requiring capital from banks or other lenders. Thus, the environmental credentials extended to a company through a favorable EIA process leading to an approval decision have considerable value. The EPA of Western Australia have always grounded their assessments in the best available science and with a high degree of consistency between individual proposals but also have set out incrementally higher standards and expectations for environmental protection over time. This appears to have earned them high respect from all stakeholders and is important for making EIA more influential than otherwise might be the case.

While we are heartened by the cooperation of diverse stakeholders in working toward an improved EIA process in Western Australia, we should note that there is one stakeholder group that we have never known to be actively and

explicitly represented: future generations. Despite the addition in 2003 of "intergenerational equity" as an object of the *Environmental Protection Act 1986* and as a guiding principle for EIA in Western Australia, this matter seemingly gets little attention. Instead, all stakeholders appear to be mainly driven by immediate interests. For the EPA itself, it appears to be intent on weathering the storms of short-term government cycles with the changes to departmental structures, efficiency, promises (i.e., chiefly for faster development approvals), and budget cuts, either actual or threatened. For industry stakeholders, time horizons appear to be based around 5–10 years resource development plans. Finally, for environmental groups, there is seemingly always a current campaign for conservation to be fought for in response to industry and government activities and the media profiling of current events in society. Sadly, the long-term view of sustainability and the interests of future generations do appear to get drowned out by the immediate concerns of EIA stakeholders.

In summary, a strong EIA system is in the best interest of all stakeholders in the process and in my mind a sign of a robust or effective EIA system is one that the stakeholders actively support or defend. However, an ongoing challenge for all practitioners is to enable the rights of future generations to be represented in current EIA processes and decision making.

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### 9.2.3 Making Policy-Level Participation Effective: Territorial Impact Assessment (TIA) of European Union Policy Proposals

Anticipated and unanticipated impacts of public policy can occur at different geographical scales. In Europe, various such effects have been observed in relation to numerous EU policies, for example, the so-called Seveso II Directive on the control of major-accident hazards (Directive 96/82/EC). In one case, a new stadium in the Netherlands could not be built adjoining a railway station given the potential for trains carrying dangerous chemicals to also use the railway and pass in close proximity to the site. This created a conflict with existing Dutch transport and land-use policy, which strongly supports good public transport access to stadia.

Since 2003, the European Commission has undertaken Impact Assessment (IA) of its policy proposals to detect and evaluate potential positive and negative economic, social, and environmental impacts. These IAs are essential documents, prepared by experts (usually consultants). While they are a laudable effort, making reliable predictions at this level of decision making is notoriously difficult, particularly as impacts normally vary quite substantially across 27 European Union member states with over 500 million inhabitants on

4.3 million km<sup>2</sup> of land and may depend in particular on the unique characteristics of a specific region or locality. As a consequence, IAs have usually remained rather vague and are unlikely to detect conflicts of the kind described above.

There have been various research projects looking into how regional and local effects may be assessed better and more reliably, funded by ESPON (European Observation Network, Territorial Development and Cohesion; [www.espon.eu](http://www.espon.eu)). These have mostly revolved around spatial (computer) modeling of impacts, focusing on ex post assessment. In addition, modeling tools for ex ante assessment have also been developed. To date, these have been used to carry out some exploratory assessments. However, overall, the perceived accuracy has remained contested. Also, data requirements for models, aiming at assessing impacts on several hundreds of regions in 27 countries in a consistent manner, are enormous. As a consequence, exercises so far have taken up to several years to complete. They have thus remained impracticable for use in “real” policy-making processes that only allow up to a few weeks for establishing evidence on potential impacts.

Against this backdrop, between 2010 and 2012, ESPON funded a stakeholder-based and participatory project on developing a Territorial Impact Assessment (TIA) methodology of European policy proposals, to be applied at the level of EU member states, with input from regional and local levels, called ESPON and TIA (EATIA). In this context, territorial impacts are seen both as impacts on spatial usage (e.g., sprawl or new infrastructure) and also as broader socioeconomic and environmental impacts that may differ in different regions or localities across the EU territory.

The EATIA project was initiated by stakeholders from the ministries responsible for spatial planning in the United Kingdom, Slovenia, and Portugal and was delivered by a project team from the Universities of Liverpool, Porto, Ljubljana, and Delft. Key priorities of the project were that TIA should provide a supportive tool in the policy-making cycle to enable European, national, and regional/local policy makers and practitioners to anticipate or adapt to emerging sectoral policies and that it should be able to be undertaken ex ante and without being delayed by heavy data requirements.

A TIA methodology was developed, covering governance, methods, and procedural aspects. In the development of the methodology, interactive learning networks played a key role. These consisted of 15–25 public and private sector stakeholders with an interest in spatial planning, territorial policy, and impact assessment in each of the three stakeholder countries. These provided for critical feedback and suggestions throughout the lifetime of the project. The work of the interactive learning network was key to devising a methodology that, overall, is perceived to be practicable and simple and which has the support of those who are supposed to use it (i.e., national, regional, and local administrations). Furthermore, the methodology was tested by other national, regional, and local practitioners in the three countries and their feedback was used to refine the approach.

The emerging TIA framework is based on a highly efficient communicative process, which is to be coordinated with other existing assessment instruments (e.g., regulatory impact assessment or strategic environmental assessment), whenever possible. The process consists of four main stages: screening, scoping, assessment, and evaluation. Key to a successful TIA is skilled interdisciplinary teams, representing various public administrations that come together with a cooperative spirit, and that reflect a high level of familiarity with the assessed policy area and wider territorial and sustainability expertise. The process is thus practitioners’ driven and qualitative.

Screening (whether or not to conduct TIA) is led by central government departments responsible for a particular policy area, supported by the department responsible for spatial planning and/or impact assessment. Once a decision is made to conduct TIA, the scope of assessment is to be established by the same bodies. Testing has shown that with some experience, screening and scoping can be completed in half a day.

Impact Assessment is done by regional- or local-level planning bodies. In this context, existing planning processes and teams are used that should be able to complete the exercise within a half-day workshop. Evaluation of assessment results is done in terms of territorial policy objectives at national levels. This is based on amalgamating and analyzing information generated at regional/local levels, which can be achieved efficiently by using web-based reporting sites. The results are to be fed into the policy negotiation process at the European level. Methods used in the TIA methodology include logical chains and matrix evaluations, based on sets of between 15 and 20 economic, social, environmental, and governance-related indicators. Furthermore, collaborative workshops and web-based feedback mechanisms play important roles.

There are good chances that the developed TIA framework will be promoted in all EU member states. In addition, efforts to develop more effective impact modeling techniques at the European level will also continue. Ideally, both, participatory national/regional/local-level assessment exercises and European-level quantitative modeling tools would be applied in a complementary manner, providing a strong evidence base for making informed European policy decisions.

For further information on the approach, go to [http://www.espon.eu/main/Menu\\_Projects/Menu\\_TargetedAnalyses/EATIA.html](http://www.espon.eu/main/Menu_Projects/Menu_TargetedAnalyses/EATIA.html)

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### 9.3 DEFINING THE PROBLEM AND DECIDING ON A DIRECTION

The preceding stories illustrate some of the complexities and subtleties associated with collaborative IA processes. The

first story demonstrates that collaboration among stakeholders does not always lead to consistently understood and supported substantive environmental enhancements. Sustainability is not the inevitable outcome of a process that generates a consensus among participants. Interactions between process and substance, and between specialist and local knowledge, need to be thoughtfully structured such that sustainability principles and substantive knowledge bound and direct IA procedures, mutual education is facilitated, and the many benefits of open engagement and collaboration with locally affected stakeholders are retained and enhanced. The second story makes the point that an effective IA process or system does not mean that all stakeholders should be uniformly satisfied with the outcome. Either extremely happy or unhappy, IA stakeholders can be problematic. The aim instead should be an IA system and process that all stakeholders can actively defend, where there is a high degree of cooperation, and where all parties have a sense of working for the “common good.” Time horizons, however, need to be extended, especially regarding the interests of future generations. The third story addresses the difficult task of facilitating stakeholder engagement at the policy level. It describes a stakeholder-based and participatory approach to TIA. The TIA methodology for assessing European policy proposals integrates both technical methods (e.g., logical chains and matrix evaluation, quantitative modeling) and collaborative procedures (e.g., interactive learning networks, collaborative workshops, web-based feedback). The story illustrates that stakeholder collaboration at the policy level is practical, and can be undertaken in a manner that is highly communicative, technically sound, and effectively coordinated with existing assessment instruments.

Numerous benefits, as highlighted in Figure 9.1, have been ascribed to effective public participation in public and private decision making. Public participation is intrinsically beneficial to participants and to society (Day, 1997; Nagel, 1987; Pateman, 1970). It is consistent with human nature. It is ethically just to involve the public in decisions that could affect their lives (Praxis, 1988).

Effective public participation has considerable developmental value (Nagel, 1987). It can facilitate a greater level of interest and involvement in public life (Morgan, 1998; Pateman, 1970). It can enhance the confidence of and political skills of participants (Day, 1997; Dunning, 1998). Citizens can more ably articulate their preferences and demands (Burdge, 2004; Day, 1997). They can be better informed about and more ably participate in planning and decision-making processes (Burdge, 2004). The application of these skills can empower people, further community identity and development, foster environmental sensitivity, and contribute to a more democratic and responsive political system (Barrow, 1997; Day, 1997). Also, social learning is promoted, skills transfers are facilitated, local service capital is created, and community buy-in is fostered (Buchan, 2003; Noble, 2009b).

Public goals can be advanced by effective public participation. Decision making can become more transparent, balanced, and accountable (Alshuwaikhat, 2005; Sinclair and Diduck, 2009). Democracy is facilitated (Sinclair and Diduck, 2009). “Regulatory-capture” by proponents can be avoided and the public can have more direct access to decision making, prior to final determinations (Hyman et al., 1988; Shepherd and Bowler, 1997; Sinclair and Diduck, 2009). Public values, perspectives, and preferences are incorporated into decision making (Morgan, 1998). Relations among diverse stakeholders may be improved (Tamburrini et al., 2011). Unrepresented people are able to present their views. The public is able to examine expert knowledge and to weigh and test the positions and decisions of elected representatives (Pateman, 1970). Public alienation and marginalization are less likely to occur. The public has a better understanding of environmental conditions, project characteristics, local issues, and potential impacts (Lee, 2000; O’Faircheallaigh, 2010). Decision making is more likely to reflect and be responsive to stakeholder and community needs (Shepherd and Bowler, 1997; US EPA, 1988b). Decision making is fairer and more accountable to the public (Barrow, 1997). A check on government and private action is provided. The balance of power (i.e., empowering marginalized groups) can be shifted and decentralized (O’Faircheallaigh, 2010). There is a greater potential for individuals, groups, and communities to use IA and other decision-making tools to help solve their own problems and to better influence their own futures (SERM, undated). The ability of the public and communities to cope with change can be enhanced (Burdge, 2004).

Better decisions and more effective, balanced, and efficient decision making can result from effective public participation (Burdge, 2004; Elling, 2011; Howell et al., 1987; Lee, 2000; Noble, 2009b). A means is provided for obtaining local and traditional knowledge and for determining local issues, perspectives, and values (Bisset, 1996; Glasson et al., 1999; Morgan, 1998; Noble, 2009b). The public can help diagnose and clarify problems, opportunities, and solutions, illuminate goals and objectives, formulate and evaluate options, identify, predict, and integrate impacts and socially acceptable solutions, interpret impact significance, determine appropriate mitigation, compensation, and monitoring measures, and decide on proposal acceptability (Barrow, 1997; Greer-Wooten, 1997; Hughes, 1998; Noble, 2009b; Sinclair and Diduck, 2009; US EPA, 1988b). Public contributions to decision making can make it easier to establish priorities. Access is provided to local and traditional knowledge (Sinclair and Diduck, 2009). Management expertise can be enhanced and new financial, human, and in-kind resources accessed (Praxis, 1988; Sinclair and Diduck, 2009). Decision makers are better able to plan for and adapt to change (Day, 1997; Lee, 2000). Costs and delays associated with public opposition are less likely (Glasson et al., 1999; Noble, 2009b). Project management can focus on key public issues (Praxis, 1988). Approvals and

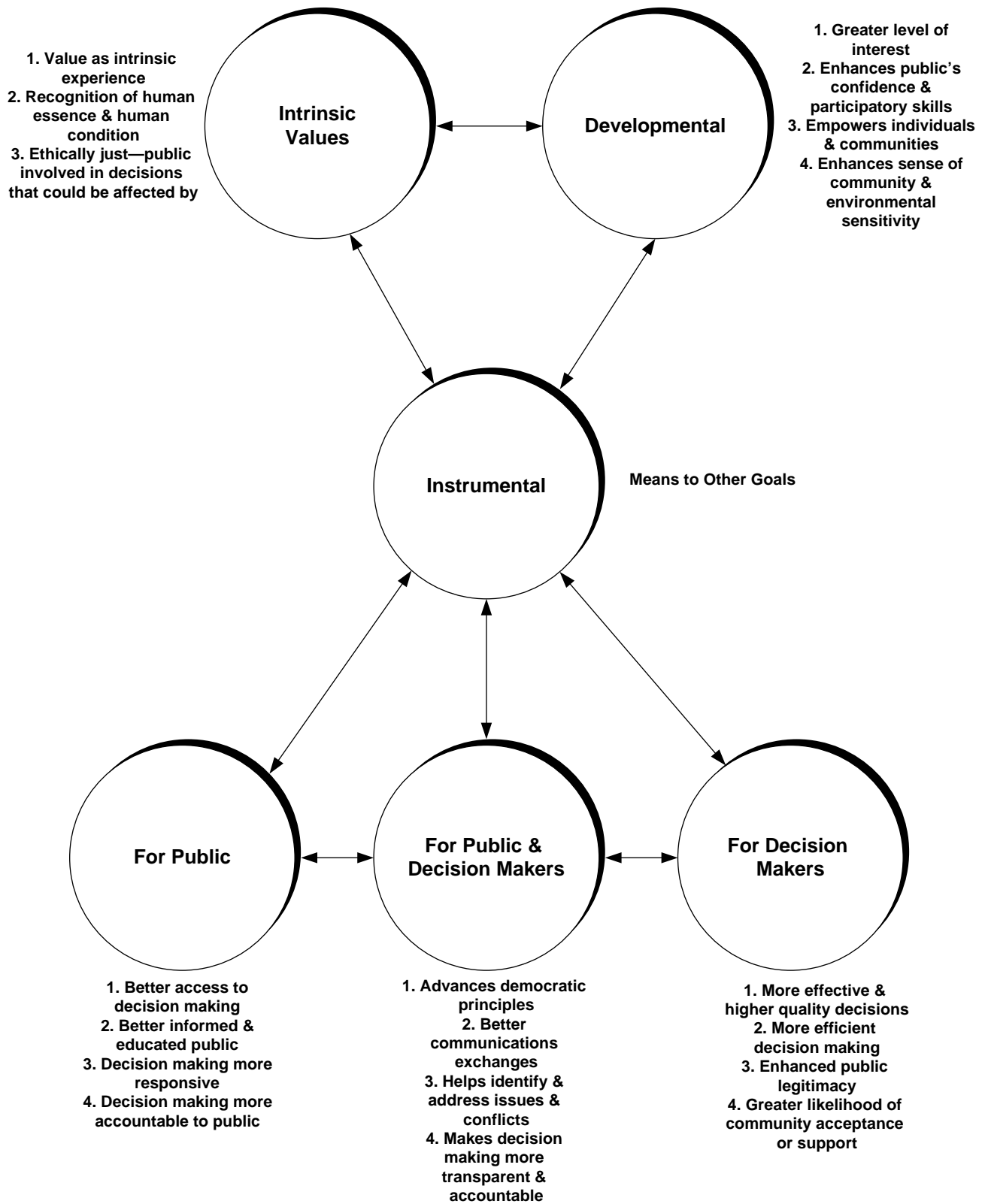


Figure 9.1 Examples of potential benefits of effective public participation.

implementation tend to be less complex and confrontational (Noble, 2009b; SERM, undated). Decision makers are viewed as more credible and the decision-making process is perceived as more legitimate (Barrow, 1997; Creighton et al., 1983; Smith, 1993). The possibility of legal challenges is reduced (Noble, 2009b). There is likely to be less hostility and a greater level of community trust, acceptance, and sometimes support for both the process and for the decisions resulting from the process (Hyman et al., 1988; Lee, 2000; Shepherd and Bowler, 1997; Tamburrini et al., 2011).

The public and decision makers can benefit jointly from a decision-making process based on popular sovereignty and political equality principles. All parties benefit when misunderstandings are clarified and when information and knowledge are effectively shared (Hughes, 1998). Effective public participation provides a means of identifying and a forum for resolving issues (Bisset, 1996; Hughes, 1998). It offers a mechanism for building consensus and for avoiding, reducing, and resolving conflicts (Greer-Wooten, 1997; Praxis, 1988; Tamburrini et al., 2011). It can contribute to more open, transparent, and democratic planning and decision making (CCMS, 1995; Shepherd and Bowler, 1997). Narrow technical biases can be ameliorated. A countervailing force is established to offset administrative and political power concentrations. Broad public involvement and support also can facilitate sustainability initiatives (Barrow, 1997; SERM, undated). Effective community-based public participation approaches can facilitate learning, build IA capacity, and contribute to better practice (Sinclair et al., 2009).

It would be difficult to realize most of these ascribed benefits in an IA process characterized by late public involvement and/or through periodic public involvement events intended largely to inform the public. Instead, early public involvement and a more continuous and interactive IA process seem more in order. Effective two-way communications and mutual education seem essential. Mechanisms to anticipate, avoid, and resolve disputes, to build consensus, to collaboratively plan, to solve problems, and to take advantage of opportunities all appear necessary. These elements of effective public participation, as illustrated in Figure 9.2, need to be guided by general principles, goals, and good practices, structured by integrative frameworks and bounded by limits of acceptable practice.

It is far from clear if or how well these elements of effective IA public participation are being or are likely to be satisfied. There are both positive and negative patterns and trends. There is also considerable variability in the quality of IA practice. IA requirements and practices have significantly increased public information and input into agency decision making (US CEQ, 1997a). Earlier and more continuous public consultation is being emphasized to a greater extent. There are numerous examples of sincere, creative, and effective approaches for involving the public, for resolving disputes, and for collaboratively solving problems (Carpenter, 1991; Creighton et al., 1983, 1999; DeSario and Langton,

1987; Gray, 1989; Susskind and Cruikshank, 1987; Susskind et al., 1999). A concerted effort has been made to provide detailed guidance and to identify and interpret the lessons of public involvement, alternative dispute resolution, and collaborative planning practice (Creighton et al., 1983, 1999; CSA, 1996; PCSD, 1997; Praxis, 1988; US DOE, 1998; US EPA, 2001a,b). In recent years, there has been a greater emphasis on two-way communications, on transparent and accountable decision making, on outreach to traditionally underrepresented groups and NGOs, on facilitating procedural and distributive justice, and on community empowerment. These trends, analyses, and guidance materials, although pertaining to many forms of public and private environmental decision making, also are largely applicable to IA practice.

Concurrent with these positive trends and developments, there has been a tendency for public agencies to opt for forms of IA that preclude or severely restrict public involvement (Shepherd and Bowler, 1997; Solomon et al., 1997). The trends toward deregulation, the application of business principles and concepts to public administration, and privatization could further inhibit public involvement in IA practice (Bisset, 1996; Sinclair and Diduck, 2001). The treatment of public participation in IA guidelines is highly variable. Too frequently, guidelines are confusing, lacking in practical guidance, and weak in proactively advocating public involvement (Hughes, 1998). The public role in IA practice is often poorly defined (Harrop and Nixon, 1999). Much of the time, public involvement begins after major decisions have been made and only occurs at two or three key decision points in the IA process (Freudenburg, 1983; Shepherd and Bowler, 1997; Solomon et al., 1997). Oftentimes, public consultation is limited to disseminating information and gathering public comments, frequently in poorly structured processes. The range of public consultation methods employed in practice remains narrow and there is a tendency to overemphasize quantitative methods and biological and physical impacts (Solomon et al., 1997). Public participation rarely extends into the postapproval stage (Harrop and Nixon, 1999).

The gulf in perspectives between proponents and the public regarding the need for and role of public participation is still considerable (Fell and Sadler, 1999). The level of public distrust and cynicism remain high concerning the motives of decision makers and the weight they attach to public comments and suggestions (Mittelstaedt et al., 1997). Citizens sometimes are frustrated and feel that they are being treated as adversaries rather than as welcome participants (US CEQ, 1997a). In some cases the role of citizens is substantial and influential. But in others it is largely symbolic. There is a particular need for reforms to enhance the involvement and influence of indigenous peoples and governments (Mittelstaedt et al., 1997; Paci et al., 2002; US CEQ, 1997a). Despite the many benefits of effective public participation and the array of instructive analyses and guidance materials, the reality of public participation still falls well short of the promise (Lawrence et al., 1997). This

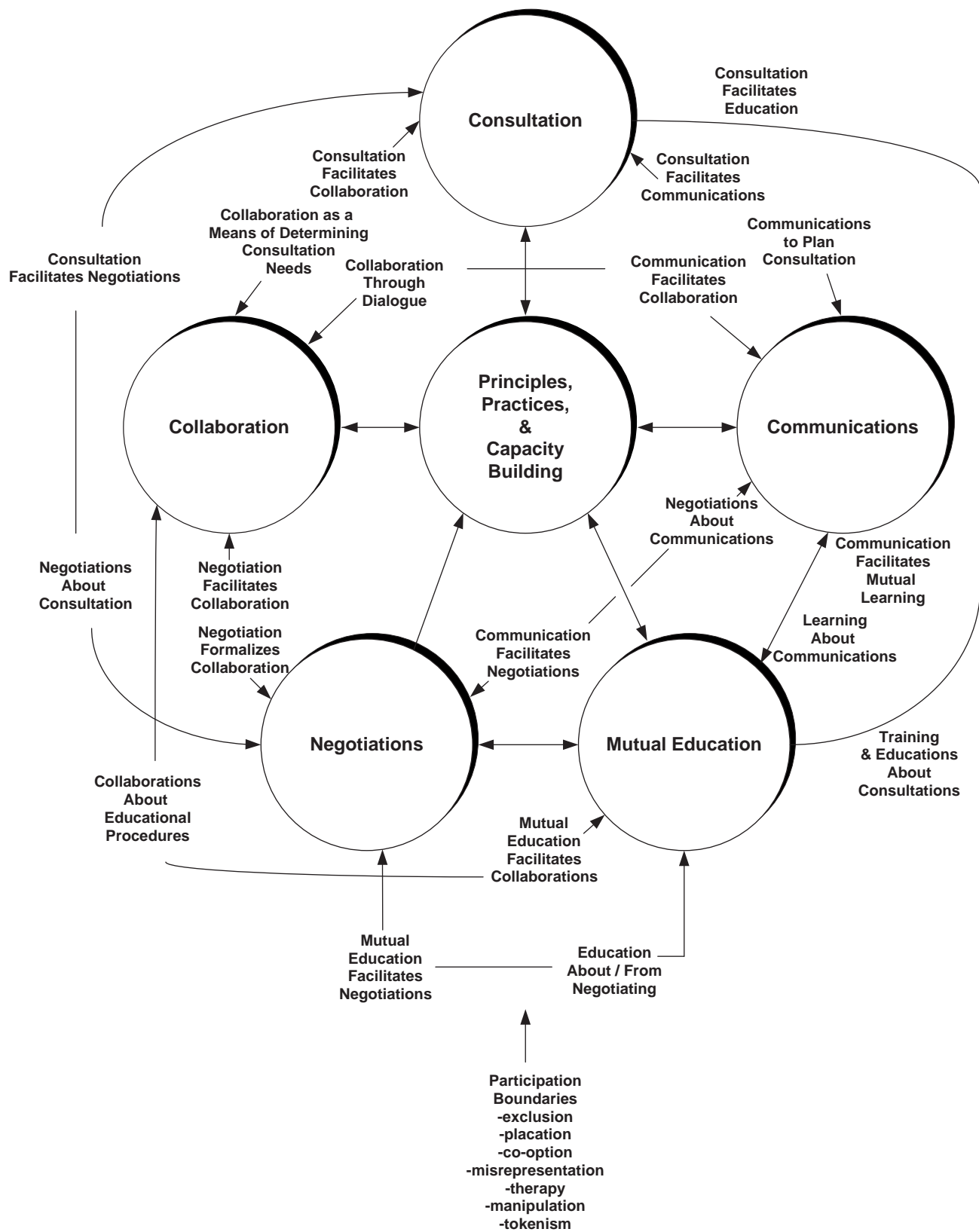


Figure 9.2 Examples of interactions among IA public participation types.



discrepancy between potential and performance raises several questions. (1) Are there major disadvantages, which largely offset the benefits of effective public participation? (2) Are there unresolved, and perhaps irresolvable issues, which generally preclude an enhanced level of public participation in IA practice? (3) Is the problem simply one of applying insights and lessons from the available literature and guidance materials? (4) Are the relevant prescriptive materials too scattered and in need of consolidation and succinct presentation? (5) Is it necessary to integrate additional concepts and frameworks? In Section 9.4 we answer each of these questions. We also seek to maximize the benefits of effective public participation (as highlighted in Figure 9.1) and to address and integrate the elements of effective IA public participation (as displayed in Figure 9.2). The Section 9.4 analyses provide the foundation for the collaborative IA process presented in Section 9.5.

## 9.4 SELECTING THE MOST APPROPRIATE ROUTE

### 9.4.1 Disadvantages and Issues

Public participation is a generic term for all types of activities designed to include the public in the decision-making process, prior to and after a decision (Ross and Thompson, 2002). IA public participation entails the active involvement of the public in the IA process (Sinclair and Diduck, 2009). The role of the public is direct and acknowledged (Lee, 2000). Members of the public can influence or attempt to influence decision-making outcomes (Nagel, 1987). Meaningful public participation (i.e., more than a one-way flow of information) encompasses such essential participation elements as integrity and accountability, influence, fair notice and time, inclusiveness and adequate representation, fair and open dialogue, multiple and appropriate methods, two-way communications and education, adequate and accessible information, participant support, and informed participation regarding all environmental aspects of the proposed action (Law et al., 2005; Sinclair and Diduck, 2009; Sinclair et al., 2012; Stewart and Sinclair, 2007). Most parties generally accept that public participation in IA practice is desirable. However, qualifications and exceptions are rapidly identified. There also are varying definitions of what represents public participation (e.g., involvement, influence) and when it is most appropriate for it to occur. “When” concerns both the circumstances under which public participation is appropriate and when in the IA process. Table 9.1 lists examples of reasons commonly advanced for why public participation is undesirable or why it should be severely limited. Comments regarding the validity of the reasons also are provided. Public participation may be viewed as undesirable by proponents and regulators or by members of the public, albeit for different reasons.

The case against public participation, as detailed in Table 9.1, is usually either dubious or overstated. If public participation is accepted as necessary (i.e., a right) and

generally desirable, then arguably the burden of proof should be on those seeking to prevent or curtail public participation. Moreover, to realize the benefits of public participation (as highlighted in Figure 9.1), it is generally more desirable for public participation to start early in the IA process and to occur either continuously or at frequent intervals throughout the IA process. Circumstances do vary, however. Occasionally, there may be valid reasons for precluding or limiting public participation activities. At a minimum, consistent with the goal of decision-making transparency, a clear rationale should be provided for such limitations.

The concerns listed in Table 9.1 can be valid when a public participation program is poorly designed or executed. Care should be taken to ensure that avoidable public participation “disadvantages” do not occur. The public participation program should be appropriate (i.e., suited to the situation), efficient (i.e., time and other resources are not wasted), and effective (i.e., achieves the shared objectives of the participants). The scope and limits of the program should be jointly determined and should be clearly specified from the outset. The program should evolve in conjunction with the IA process. It should include an appropriate blending of consultation (e.g., information exchange, continuous involvement), communications (e.g., publicity, dialogue), education (e.g., stakeholder, proponent, mutual), negotiations (e.g., to identify, avoid, and resolve disputes), and collaboration (e.g., to build consensus, to jointly solve problems, to create “win-win” solutions) elements.

Except in very special circumstances, the “disadvantages” of public participation in the IA process do not appear to be valid or can be avoided or minimized through good public participation practice. Therefore, public participation disadvantages do not provide an adequate explanation for the discrepancy between the potential and the performance of public participation in the IA process.

Public participation issues can be more of a challenge. Figure 9.3 highlights some issues often encountered in IA public participation practice. Clearly, the management of public participation activities in the IA process requires numerous, complex, difficult, and subjective decisions. These public participation issues do not provide a rationale for not undertaking or severely restricting public participation activities. Quite the opposite! The issues are not resolvable through technical analysis or political expediency. Instead, they should be addressed jointly with interested and affected parties. A breadth of perspectives can make it easier to identify and explore issues. A sounder foundation also can be established for reaching and substantiating interpretations and decisions.

Public participation has been a component of IA practice for more than 30 years. The quality and effectiveness of practice (both in IA and in related fields) has advanced rapidly, especially over the past 10–15 years. Thus, there are ample good practice examples and guidance materials to help in designing and executing public participation and dispute resolution programs, for anticipating and managing

**Table 9.1** Analyses of “Disadvantages” of Public Participation

<i>Proponents and Regulators</i>	
It costs too much	<ul style="list-style-type: none"> <li>• The public participation program can be designed to stay within available resources</li> <li>• Public participation is likely to be a tiny fraction of overall project costs. It is a cost of good practice</li> <li>• The public often contributes insights that lead to cost savings</li> <li>• Public opposition is more likely with a closed process. The additional costs associated with approvals, litigation, and implementation are likely to be far greater than the costs of public participation</li> </ul>
It will lead to delays	<ul style="list-style-type: none"> <li>• Public participation can extend timelines but is an essential facet of democratic decision making</li> <li>• A properly designed and managed public participation program should not result in significant delays</li> <li>• The time associated with preparing for and participating in lengthy, adversarial hearings can be considerable. Hearings can often be avoided or greatly abbreviated with effective public participation</li> <li>• The implementation timetable, even if approval occurs, will likely be extended because the “stage has not been set” through effective public participation</li> </ul>
It will make decision making less efficient	<ul style="list-style-type: none"> <li>• Short-term efficiency gains are likely to be more than offset by the costs and delays associated with not consulting the public</li> <li>• Public knowledge and experience can provide insights that lead to greater efficiencies</li> <li>• Public issues can help focus the IA process (i.e., scoping)</li> <li>• The public has a right to be involved in decisions that affect them</li> <li>• IA leads to more open and balanced decision making</li> </ul>
It is divisive. It will result in a partisan process	<ul style="list-style-type: none"> <li>• One of purposes of IA is to broaden the decision making to encompass more than efficiency concerns</li> <li>• Not involving the public can be even more divisive. Conflict is deferred and usually exacerbated</li> <li>• Effective public participation can help build consensus and avoid, ameliorate, and resolve conflicts</li> <li>• Public participation is an effective check against partisan “technical” analyses and interpretations</li> </ul>
The public lacks the knowledge and skills to contribute to the process	<ul style="list-style-type: none"> <li>• Part of effective IA participation involves enhancing public understanding</li> <li>• The public usually possesses valuable local knowledge and experiences, which can enhance the process</li> <li>• Much of IA practice involves interpretations of significance and acceptability. The public can and should contribute to such interpretations</li> </ul>
The public will adopt a “not in my backyard” position	<ul style="list-style-type: none"> <li>• NIMBY is a natural, reasonable, and appropriate response to a potential intrusion into the community</li> <li>• Early public involvement can mean that the public is a partner in identifying and comparing choices</li> <li>• There are generally multiple publics with multiple perspectives</li> <li>• Perspectives often change through the course of the public participation program</li> <li>• NIMBY is less likely with a voluntary siting approach</li> </ul>
It will raise the project profile and empower opponents	<ul style="list-style-type: none"> <li>• The public has a right to be informed about decisions that might affect them</li> <li>• An effective public participation program can clarify misunderstandings that are often the basis for conflict. A worthwhile project should be able to stand up well to public scrutiny</li> <li>• Effective public participation can reduce opposition and lead to a greater level of community acceptance and support. It could help scope or even avoid legal action</li> <li>• A demonstrably inadequate public participation can be a source of even greater power for opponents</li> </ul>
The public only has one point of view (e.g., environmentalists), which we know	<ul style="list-style-type: none"> <li>• There are multiple publics</li> <li>• The public has multiple values, perspectives, and interests</li> <li>• Public perceptions, attitudes, and positions often change through the process</li> <li>• Even if positions are understood, they should still be expressed. It is unlikely that the bases for positions will be fully understood without effective public participation</li> </ul>
Short-term local interests may have to be overruled by regional, long-term needs	<ul style="list-style-type: none"> <li>• Agencies and regulators can retain final decision-making authority</li> <li>• Local participation is essential to fully understand the trade-offs involved</li> <li>• Local participation can help in addressing mitigation and compensation options and measures</li> <li>• The dichotomy can be a false one. Sometimes local participation makes it possible to identify “win-win” solutions</li> </ul>
We will lose control of the process	<ul style="list-style-type: none"> <li>• Proponents and regulators can always retain final decision-making authority</li> <li>• The delegation or sharing of control is a choice. It can increase decision-making credibility and legitimacy</li> <li>• There are many forms of public participation that do not involve power sharing or delegation</li> </ul>
We lack the necessary participation skills	<ul style="list-style-type: none"> <li>• There are numerous specialists in public participation and alternative dispute resolution</li> <li>• There are many “user-friendly” public participation resource materials, which are readily available</li> <li>• Public participation training programs are widely available</li> </ul>
The process will be “hijacked” by activists	<ul style="list-style-type: none"> <li>• There is a danger that a few individuals can dominate a public meeting</li> <li>• There are many other public participation methods that are less prone to such problems</li> <li>• Activists usually have something to contribute and should be consulted</li> <li>• Approaching multiple publics using a variety of methods can largely offset such problems</li> </ul>

**Table 9.1** (Continued)

<i>Proponents and Regulators</i>	
The participants are not “representative” of the public	<ul style="list-style-type: none"> <li>• Public participation is a voluntary process. Some element of self-selection is inevitable</li> <li>• Ensuring that the full range of relevant values and interests are integrated into the process is usually more important than how representative an individual is of a larger constituency</li> <li>• A valid concern or suggestion is of value regardless of the level of support</li> <li>• The use of multiple consultation methods and ample opportunities for stakeholder representatives to consult with their constituencies can further ameliorate the issue of representation</li> </ul>
It will lead to land speculation	<ul style="list-style-type: none"> <li>• Land speculation is an issue only during site selection</li> <li>• Land can be purchased or expropriated at values prior to site announcements. Land can be optioned</li> <li>• The validity of the choice can be subject to public scrutiny before final decisions are made</li> </ul>
It will result in the release of confidential materials	<ul style="list-style-type: none"> <li>• This is rarely a valid issue</li> <li>• It is usually possible to protect proprietary information in an IA process</li> <li>• Confidentiality issues tend to arise more frequently as part of hearings and court cases. Effective public participation can reduce the likelihood and scope of such proceedings</li> </ul>
It will confuse the process. It will be less rational. There will be multiple perspectives and possibly errors	<ul style="list-style-type: none"> <li>• There should be minimal confusion with a well-designed and well-managed public participation program</li> <li>• Data can be checked for accuracy. Facts and values are mixed in practice</li> <li>• Multiple perspectives simply reflect the value context. Different perspectives can facilitate interpretations, address uncertainties, and help resolve problems</li> <li>• Complex projects require more, not less, participation to ensure that potential impacts and uncertainties are adequately identified and interpreted. Effective public participation planning is essential</li> </ul>
It will create expectations that we cannot fulfill. The results could be inconclusive	<ul style="list-style-type: none"> <li>• The scope and limits of the public participation program can be clearly defined from the outset</li> <li>• Public participation provides a means of determining and of transmitting commitments to the community</li> <li>• Inconclusive public participation results could simply reflect multiple perspectives and divisions within the community. This does not preclude taking the comments and suggestions provided into consideration</li> </ul>
Public issues will dominate the process. The environment will suffer	<ul style="list-style-type: none"> <li>• Sometimes public participation can help build consensus and identify and narrow differences</li> <li>• Public issues generally closely parallel environmental issues and uncertainties</li> <li>• The public is often a useful source for identifying and interpreting potential environmental impacts and uncertainties. Perceptions of impacts and uncertainties are “real” social impacts</li> <li>• The public participation program provides a means of addressing public misconceptions</li> <li>• The assessment of public issues does not preclude considering other issues and concerns. The public is usually supportive of addressing impacts, uncertainties, and concerns identified by others</li> </ul>
The public will lose interest or will not be interested in policies or programs	<ul style="list-style-type: none"> <li>• Participation is voluntary</li> <li>• A focused and well-planned participation program is more likely to maintain interest</li> <li>• Participation for plans, policies, and programs requires alternative approaches (e.g., the involvement of national and regional NGOs, surveys) rather than no participation</li> </ul>
The project is too urgent	<ul style="list-style-type: none"> <li>• If the need is genuine, the public is often supportive of an accelerated project schedule. “Urgent” timelines are frequently artificial</li> <li>• Public participation can usually be designed to meet a project schedule</li> <li>• Even when the need is urgent, it is still essential to minimize adverse impacts and uncertainties. The public can contribute to such efforts</li> </ul>
It is too early in the process. We don’t yet have a proposal	<ul style="list-style-type: none"> <li>• Involving the public when there is a need or opportunity and no clear proposal is the best time to commence public participation. In this way the public can fully participate in the decisions leading up to the proposal determination</li> <li>• One of the major public objections tends to be that the decisions have already been made</li> </ul>
The project is too small. There are no or negligible impacts	<ul style="list-style-type: none"> <li>• Small projects with no to negligible impacts are not (or should not be) subject to IA requirements</li> <li>• Such projects can be addressed with categorical or class assessments or by means of a streamlined IA process. There should be a “bump-up provision” for significant impacts. Some level of public participation can still occur</li> <li>• There is still an argument for decision-making openness and transparency regardless of impact scale</li> <li>• Cumulative effects can be an issue with multiple small projects or projects in sensitive settings. The public can assume a valuable role in addressing such issues</li> <li>• Negligible is a matter of interpretation. The public can contribute to such interpretations</li> </ul>

(Continued)

**Table 9.1** (Continued)*Nongovernmental Organizations and Individual Members of the Public*

The decisions have already been made. What's the point?	<ul style="list-style-type: none"> <li>• There may be cases of “tokenism” and “placation” where decisions have already been made. Where this is clearly the case, it may be appropriate not to participate</li> <li>• Sometimes participating can lead to a reconsideration of or a reversal of a decision</li> <li>• Often, decisions are tentative. Public scrutiny can lead to reversals</li> </ul>
The public will be co-opted or manipulated	<ul style="list-style-type: none"> <li>• The public can participate while making it clear that they do not endorse either the process or the outcome</li> <li>• As with proponents and regulators, the public should not make up their mind from the outset</li> <li>• Changing positions based on new knowledge and thoughtful deliberations is not co-option or manipulation</li> <li>• It is the proponent and regulator's responsibility to avoid bias and misrepresentation. The public, with adequate support, can test data and interpretations (e.g., independent peer reviews)</li> </ul>
We don't have the time	<ul style="list-style-type: none"> <li>• The public participation program should be designed so that the time requirements for individuals and groups to participate are no more than absolutely necessary for effective participation</li> <li>• The use of a range of methods to involve various publics should reduce the time burden on any one group or individual</li> <li>• The timing and duration of public participation activities should respect the other demands on the time of participants (e.g., planting season). Outreach methods (e.g., kitchen table meetings) can sometimes be helpful</li> </ul>
We don't have the resources	<ul style="list-style-type: none"> <li>• Sometimes participant or intervener funding is warranted. The criteria for funding should be clearly specified</li> <li>• Payments for expenses can often be helpful, as well as the provision and sharing of resources</li> <li>• Public participation programs can be designed to ensure that resource constraints do not preclude or seriously inhibit public participation, especially for traditionally underrepresented groups</li> </ul>

Sources: Barrow (1997), Canter (1996), Day (1997), Glasson et al. (1999), Nagel (1987), Petts (2003), Priscoli (1982), SERM (undated), Shepherd and Bowler (1997), UNECE (2006), UNEP (1997).

problems and dilemmas, for making difficult judgments, for reconciling or accommodating conflicting perspectives, for ameliorating obstacles, and for managing uncertainties. Dilemmas, obstacles, and problems, which appear “impossible” in the abstract, can generally be worked through in practice, especially by effectively drawing upon the knowledge, experience, and judgment of the public. The difficult issues that emerge in a public participation program reflect the complexities of decision making in a pluralistic society. There are no “quick fixes.” A sufficient record of public participation “successes” and “failures” has been amassed to suggest that practical resolutions or accommodations to issues such as those listed in Figure 9.3 can often be reached.

At the same time, much public participation literature is not derived from theory nor does it provide a coherent basis for deriving theory. It is difficult to measure public participation effectiveness. Codes of good conduct are largely very general. Analyses of public participation effectiveness tend to be qualitative and anecdotal. Given the difficult issues often encountered and the uncertain conceptual foundation, it is not surprising that the quality and effectiveness of IA public participation efforts are highly variable. The limits of and difficulties sometimes encountered in practice reinforce the need for more effective public participation. They may

occasionally explain why public participation efforts fall short of aspirations. They do not justify the status quo. Also, they do not imply that potential public participation benefits are either inappropriate or unattainable. They do underscore the need to thoughtfully and jointly plan and execute public participation programs, to draw upon the lessons of public participation practice, and to anticipate and effectively address the many types of issues that often emerge in practice.

#### 9.4.2 Principles and Practices

Public participation in IA practice has advanced to the point that a core body of prescriptive knowledge is emerging. Table 9.2 identifies general, consultation, communications, mutual education, negotiations, and collaboration examples of public participation goals, principles, and good practices. The table demonstrates that there is a considerable knowledge base potentially relevant to IA process design and management.

It is apparent from Table 9.2 that the various elements of IA public participation are highly interdependent. Goals and principles guide good practice. Good practices extend from and contribute to goals and principles. The general goals, principles, and practices provide a framework for the

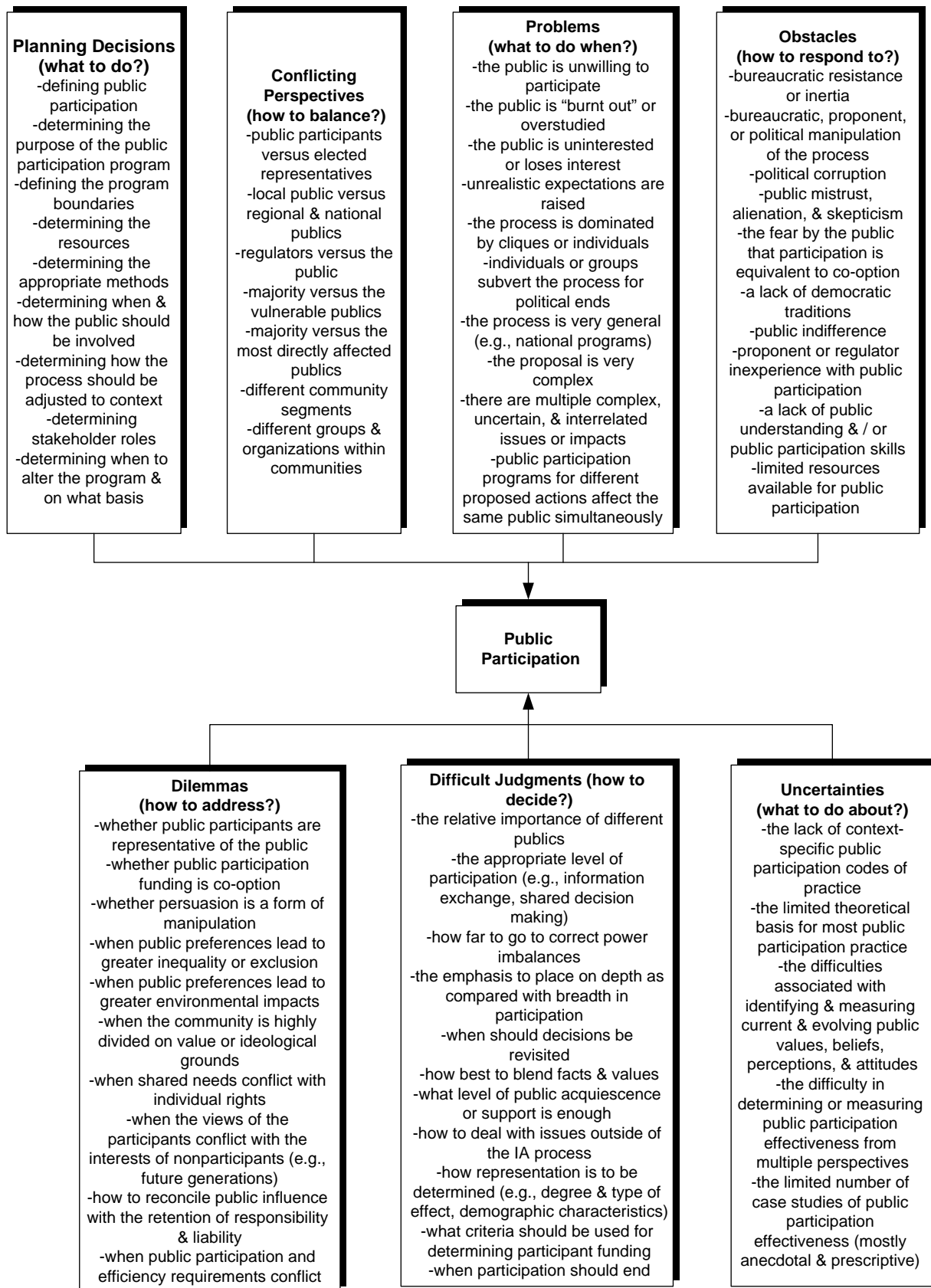


Figure 9.3 Examples of public participation issues.

**Table 9.2** Examples of IA Public Participation Goals, Principles, and Good Practices

Goals	Principles	Good Practices
<i>General</i>		
To produce better decisions	Be honest, open, inclusive, and responsive	Undertake community or social profiling
To earn the trust of public participants	Explicitly identify public participation	Select methods to match objectives,
To increase decision-making transparency and accountability	objectives; clearly identify decisions to be made	context, issues, publics, and stage in IA process
To promote fairness	Explicitly identify public participation limits	Focus on issues as identified by the public
To build credibility with those who might be affected	Design public participation efforts to match situation	Design the process to accommodate stakeholder values
To integrate public participation and decision making	Ensure that all interests are represented; define the public broadly; inclusive and equitable	Clearly define roles and responsibilities
To contribute to more environmentally responsible decisions	Ensure adequate resources, including time, for effective public participation	Ensure sufficient time and flexibility for adequate public participation
To make it possible for participation to cascade from policies to plans to projects	Recognize that the people have a right and a responsibility to manage their own affairs	Seek to make interactions informal and personal
	Design process to be responsive to community needs	Recognize and ameliorate barriers to participation
	Recognize public contribution to process	Design the process to motivate public to participate constructively
	Recognize “nestedness” of IAs, policies, and projects	Clearly and frequently inform public of process progress
	Be sensitive to the role of professional cultures in limiting the effectiveness of the IA process and related participation	Evaluate, with public, by stage, effectiveness of public participation measures; adjust and supplement as needed
	Adapted to context	Address the multiplicity of stakeholders and types of knowledge, data, and interests in a comprehensive way
		Employ qualified and unbiased participation specialists
<i>Consultation</i>		
To involve interested and affected parties early and throughout the IA process	Involve members of the public in decisions that might affect them	Support and institutionalize public participation
To provide effective notice	Work for broad participation	Utilize SEA as a bridge to better public participation
To identify public values and concerns	Ensure that decision making facilitates public scrutiny	Identify relevant interest groups; actively seek to involve NGOs
To provide to the public relevant information regarding the proposal, possible options, and potential impacts	The public has a right to information relevant to potential decisions that might affect them	Provide participant funding
To make decision making more transparent and accountable	Provide an opportunity for those otherwise unrepresented to express their views (outreach); provide the resources necessary to ensure their effective participation	Involve before IA begins and after it is completed
To respect indigenous world views and rights and take indigenous concerns seriously	Ensure awareness of range of stakeholder views	Prepare a public involvement plan
To obtain feedback from the public concerning values, perspectives, preferences, and suggestions	Obtain and accommodate local and traditional knowledge	Involve the interested and affected publics in formulating the public involvement plan
To ensure that public concerns are taken seriously	Seek to better understand public perceptions of change including perceived causes and effects	Select and adapt involvement methods to stakeholder characteristics
To provide in-depth involvement opportunities	Balance the needs of current and future generations	Design consultation for the convenience of the public
To achieve consensus around desired outcomes	Consultation most effective when strong stakeholder networks and high expertise level	Interview representatives of each group to identify potential concerns
To involve traditionally unrepresented and underrepresented groups and segments of society		Share information openly
To contribute to institutional reform		Adopt inclusive scoping approach; restrictive scoping can exclude potentially affected stakeholders
		Clearly explain how public input will be used; provide explanations if input rejected; provide prompt responses

**Table 9.2** (Continued)

Goals	Principles	Good Practices
	<p>The public should have an opportunity to comment prior to each decision in the process</p> <p>Responses should be provided to all public comments and suggestions</p> <p>Involve the public early in the process (e.g., problem definition, alternatives identification, criteria identification, public identification)</p> <p>Involve regulators from the outset</p> <p>Fully document record of public involvement</p>	<p>Take into account public attitude toward proposal and process (e.g., acceptance, rejection, ambivalence, support)</p> <p>Maintain the visibility of the public consultation program</p> <p>Identify and ameliorate barriers to information flow (e.g., lack of awareness, legal, financial, technical)</p> <p>Place greater emphasis on interactive formats, such as workshops or coffee klatches, in preference to public hearings or large public meetings</p> <p>Involve the public in approvals and implementation</p> <p>Critically evaluate effectiveness of public participation methods</p> <p>Use social media to magnify public participation</p>
<i>Communications</i>		
To enhance public, proponent, and regulator understanding and perceptions of reality	View IA as a form of communicative action	Learn to speak the public's language
To facilitate the interchange of ideas among citizens	Minimize inaccuracies	Allow plenty of time for public to understand and assimilate information; provide opportunities to cross-examine
To encourage respectful speaking and listening	Communications materials should be adapted to the needs of each participant group	Simplify technical and scientific language
To establish and maintain a dialogue between those responsible and those affected by possible actions	Provide the public with accurate, timely, pertinent, and understandable information	Recognize that process communicates content
To minimize communications distortions	Interpretations, ideas, options, and management measures should be substantiated and open to reasoned criticism	Use professional expertise to create opinions not to kill them off
To be informative, proactive, and communicative	Recognize that feelings equal facts	Recognize the importance of early discourse; design communicative strategy to suit context
To enhance the social relevance of scientific and technical knowledge	Facilitate interagency communications and cooperation	Seek to enhance the capacity to listen and hear the stories of others
To ensure that information is accurate, relevant, and unbiased	Promote reciprocal communications between competent authority and public at all stages	Look at the range of values, not just the numbers
To provide an opportunity for those otherwise unrepresented to express their views (outreach)	Recognize that listening is a critical element of participation	Ensure that documents are well planned, organized, edited, and presented
To employ effective communications skills	Recognize that communication is two way	Guard against a public relations approach that seeks to minimize or diffuse conflict in a manner that legitimizes the discourses, power, and positions of the dominant coalition
To stimulate constructive collaboration and produce common meanings	Provide channels for receiving, evaluating, and responding to individual, group, and societal public concerns and suggestions	Minimize or explain technical language where must include; avoid jargon and excessive detail
	Establish a working rapport with all stakeholders	Design documents to suit audience
	Ensure that documents clearly communicate local sentiments to decision makers	Use third-party mechanisms when there are arguments over facts
	Facilitate public access to expert information	Independently facilitate dialogue where appropriate
	Ensure more effective information dissemination	Be proactive in communicating with the public
	Provide a grievance mechanism for affected populations	Inform public of communications channels to IA team, to regulators, and to decision makers
	Use social media as a effective communications and engagement tool	Ensure that communications is clear, concise, and noncondescending

(continued)

Table 9.2 (Continued)

Goals	Principles	Good Practices
		Make effective use of visual techniques and multimedia packages (e.g., photo-simulation) Ensure follow-up results are understandable and broadly available
<i>Mutual Education</i>		
To enhance public knowledge about possible actions, environmental conditions, and possible impacts	Seek out and make use of public knowledge Treat traditional knowledge as a valid form of knowledge	Provide for local capacity building (to participate more effectively) where needed
To enhance proponent and regulatory knowledge about local conditions, values, needs, and concerns	Distinguish among technical, conceptual, social, and sustainability learning Recognize learning as a step to conflict avoidance or resolution	Provide for participant training Plan educational programs/activities in partnership with stakeholders Seek to integrate
To promote mutual, social, organizational, collaborative, and transformative learning	Treats decision making as a process of learning and negotiations among multiple actors	personal/experiential/contextual knowledge with processed knowledge
To foster cognitive enhancement (the acquisition of knowledge) and moral development (growth in the ability to make judgments about right and wrong)	Successful stakeholder involvement requires agency staff training or expert assistance	Distinguish between cognitive (knowledge dominant) and social learning (responsive communications leading to policy reframing)
To promote critical IA education (education about and through IA)	Facilitate learning about facts, values, and social identities Ensure learning is free from coercion and distortion Be open to alternative perspectives Ensure the free expression of attitudes, feelings, and intentions Seek to improve the intelligence capacity of government agencies and of communities	Reflect critically about presuppositions Pay close attention to fairness and competence Use dialogic and argumentative processes to promote learning Foster and recognize interactions among critical listening, reflection-in-action, and constructive argumentation Integrate learning from practice stories Treat the IA process as a learning process (e.g., contributes to the ability of communities and societies to learn and change)
<i>Negotiations</i>		
To avoid and reduce conflict	Ensure information to support process is complete and accurate	Identify potentially controversial issues and seek resolution with the appropriate parties
To develop decisions that are mutually acceptable to interested and affected citizens	Ensure that the full range of interests are represented and that all are free to negotiate with other stakeholders	Plan conflict resolution process, especially prenegotiations; ensure agreement on rules and procedures
To search for new conceptions of values	Correct power imbalances	Start with joint fact-finding
To meet a mix of people's substantive, procedural, and psychological interests	Ensure that third parties (e.g., mediator) have adequate training and experience and are acceptable to participants	Highlight underlying assumptions Seek to identify low cost trades
To reduce the risk of subsequent misunderstanding	Ensure that all parties have sufficient resources and authority	Design the process to suit the type of conflict
To ensure a just and equitable process	Provide for early and ample opportunities for conflict resolution	Understand the role of interpersonal dynamics and help people to move on
To ensure just and equitable outcomes	Negotiate over interests not positions Consider a wide range of alternatives that reconcile differences	Define measures of success (e.g., products, acceptance, interests protected, responsibilities defined, relationships established and maintained)
To further advancement toward social, environmental, and sustainability ends	Agree on principles or criteria to evaluate alternatives Seek to realize sustainability visions through a process of dialogue and	Stave off angry confrontation Seek points of mutual agreements; focus on options for mutual gain



**Table 9.2** (Continued)

Goals	Principles	Good Practices
	negotiations in which several possible discourses on each topic are discussed Document the agreement Agree on the process by which the agreements are to be revised Ensure commitments are observed Ensure outcomes are monitored and enforced	Seek to provide discussion platforms for multiple negotiations between stakeholders and decision makers Provide sound technical data and support to process and stakeholders Employ practical approaches for dealing with disruptive behavior Clarify the presumed liability of participants, confidentiality agreements, legal agreements, and extent to which precedents are or are not being set Visibly isolate extremes Keep public informed of progress Conduct post hoc evaluations of effectiveness
<i>Collaboration</i>		
To build consensus	Ensure information to support process is complete and accurate	Be clear regarding boundaries, who are invited to participate, expectations of contributions by participants, how facilitators are chosen, how information generated will be used, and who owns
To build and sustain trust		
To build support for and acceptance of decisions	Involve the public in idea generation and problem solving	Separate people and their personalities from the problem
To make the IA process and decision making more accountable to interested and affected parties	Facilitate interagency collaboration View IA as a partnership of proponent, state, and community	Ensure that process is flexible and where appropriate, experimental
To ensure procedural and outcome fairness	Do not substitute compromise for good problem solving	Provide sound technical data and support to process and stakeholders
To foster collaborative and creative explorations of problems and opportunities	Treat analysis as a joint effort rather than a battle over facts	Keep public informed of progress Undertake documentation in partnership with community leaders
To obtain tangible environmental and sustainability outcomes (i.e., goodness of decision)	Seek to enhance the role of IA in making decision making more accountable to public	Favor participatory (e.g., workshop-based approach) and transdisciplinary methods over top-down assessment methods, wherever practical
Ensure that principles of free, prior, and informed consent observed and human rights are respected	Define the problem rather than propose solutions or take positions View the situation as an opportunity for collaboration, not competition Recognize the interdependence of process and substance Seek to define common goals and shared visions of the future (community and environment) Recognize that consensus not always possible	Provide deliberative rather than adversarial fora Be attentive to the distribution of power by stakeholders and facilitators Adopt activist mediation model (process and outcome) Make effective use of methods for creatively redefining problems and for generating, selecting, and evaluating ideas Conduct post hoc evaluations of effectiveness

*Sources:* Alshuwaikhat (2005), Bauer and Randolph (2000), Binder et al. (2010), Bisset (2000), Bond and Morrison-Saunders (2011), Booth and Skelton (2011a), CIER (2009), Clark (1994), Cline and Lamb (2005), Creighton et al. (1999), Cuppen et al. (2012), Daniels and Walker (1996), Devlin and Yap (2008), Diduck and Sinclair (1997), Doelle and Sinclair (2006), Donnelly et al. (2007), Ebrahim (2008), Égré and Senécal (2003), Elling (2011), Esteves et al. (2012), Fell and Sadler (1999), Fischer et al. (2009), Forester (1999), Gibson (2010), Glasson et al. (1999), Healey (1997), Howell et al. (1987), Hodge (2004), IAIA (2006b), Interorganizational Committee (1994), Jiliberto (2011), Kirkpatrick and George (2006), Kørnøv and Dalkmann (2011), Kørnøv and Thissen (2000), Lawrence (2009), Lavallée and André (2005), Lemon et al. (2004), Manring et al. (1990), March (1998), Maser (1996), Maynes (1989), Moore (1986), Morgan (1988), Morgan et al. (2012), Morrison-Saunders and Sadler (2010); Motion (2005), Negev (2012), Noble and Gunn (2009), Okello et al. (2009), Praxis (1988), Peterlin et al. (2006), Petts (2003), Peirson-Smith (2012), Priscoli and Homenuck (1986), Pope and Grace (2006), Priscoli (1982), Rickson et al. (1990a), Robinson and Bond (2003), Sadler (2011b), SERM (undated), Sheate (2012), Sinclair et al. (2007), Smith (1993), Smith et al. (1997), Smith and Schin (2004), Stewart and Sinclair (2007), Susskind and Cruikshank (1987), Susskind (1999), Täbara and Pahl-Wostl (2007), Tuinstra et al. (2008), UNEP (1997), US EPA (2001b), Vicente and Partidário (2006), Webler et al. (1995), Weiss (1989), Whitelaw et al. (2009), Wirutskulshai et al. (2011), Wolsink (2010).

consultation, communications, mutual education, negotiations, and collaboration elements. Effective consultation is conducive to effective communication. Mutual education is more effective when built on a base of effective consultation and communications. Negotiations (to address differences) and collaboration (to build shared visions) are complementary. Both negotiations and collaboration are enhanced when they extend from effective consultation, communications, and mutual education. Negotiations and collaboration can foster more effective consultation, communications, and mutual education. Sensitivity to these interdependencies is essential to effective public participation in the IA process.

Public consultation and negotiations (especially alternative dispute resolution) have received the most attention in the IA literature and in the literature of related forms of environmental management. Communications is commonly characterized as communicating to the public. Education has tended to be defined as public education. Public education is sometimes equated with persuading or even manipulating the public. Collaboration is often seen as an extension of negotiations (i.e., building on “win-win” solutions to conflicts). More attention should be devoted to principles, concepts, and methods of two-way communications, mutual education, and creative and substantive collaboration (see subsequent subsections of this chapter).

Additional effectiveness reviews could help derive, refine, and test public participation principles and practices. Such analyses could demonstrate which practices contribute the most and the least to achieving public participation goals. They could illustrate critical interdependencies. They could identify when principles or practices are complementary and when they operate at cross-purposes. They could contribute to more effective public participation planning and management and to more effective integration of public participation into the IA process. They could also demonstrate how the IA process could be reformed and adapted to foster more effective public participation.

Public participation concepts and categories of methods often are displayed as continua, as illustrated in Table 9.3. Continua are useful for grouping methods. They can illustrate which categories of methods are best suited to achieving alternative citizen participation goals (e.g., citizen control, citizen autonomy, citizen influence, citizen involvement). They can indicate which groupings are more appropriate to situations characterized by varying mixes of cooperation and conflict. They can assist in role definition for public agencies, the public, and third parties. They can provide a general sense of major methods’ characteristics (e.g., degrees of formality, continuity, and intensity). There are some inconsistencies in the placement of various categories along the continua. These differences reflect varying definitions of categories (e.g., one- versus two-way communications and education) and varying role interpretations.

A continuum clearly and succinctly displays major differences. But only differences for a single criterion can be displayed at a time. The impression can be created that only

one category can be used (it is possible to use several in an IA process) and that categories further along the continuum are somehow better (it is more often a case of matching the methods to the context). Public participation methods can be classified in ways that do not involve continua. They can, for example, be categorized by function (e.g., information dissemination, information collection, initiative planning, reactive planning, decision making, participation process support) or by operational characteristics (e.g., large group meetings, small group meetings, organizational approaches, media, community interaction, legal mechanisms). Matrices can display differences along more than one dimension. Table 9.4, for example, clusters methods by public participation element (e.g., consultation) and by role (e.g., information exchange, continuous involvement, formal involvement).

Public participation texts and manuals generally describe the characteristics, advantages, and disadvantages of numerous individual methods. Sometimes, connections are drawn between the methods and public participation goals. Ideally, a consistent set of criteria (based on public participation goals and principles) would be applied to each method grouping and/or each method. The application of scaling procedures could help ensure that differences are consistently addressed. Such analyses would be further strengthened if linked to IA process activities (e.g., scoping), if assessed for varying contexts (e.g., third-world countries), and if supported by systematic reviews of IA effectiveness analyses.

### 9.4.3 Consultation

With public consultation or involvement the public is informed about proposals. They also express their views about proposals. These interactions occur prior to decision making (Parenteau, 1988). The decision-making process should facilitate public scrutiny and encourage effective public participation (Gibson, 2010). Public concerns and suggestions are taken into account by decision makers (US EPA, 1988b). Public inputs inform but do not dictate decisions. Proponents and regulators retain final decision-making authority (Smith, 1993).

Figure 9.4 illustrates how a public involvement process might unfold. Early consultation provides a general sense of such matters as issues, levels of interest, key people and organizations, organizational mandates and decision-making procedures, and barriers to participation. Early consultation activities provide a basis for initial consultation planning. Initial consultation planning establishes preliminary goals, determines the special characteristics of the situation, indicates study team requirements, highlights institutional constraints and stakeholder vulnerabilities, and identifies decision makers, the various publics, and other stakeholders.

Stakeholder identification is a critical element of public involvement planning. Individuals, groups, organizations,



Table 9.3 (Continued)

<b>Low Degree of Administrative Formality</b>	Fact-Finding Unassisted Procedures	Facilitation	Mediation Dispute Review Board	Nonbinding Arbitration	Binding Arbitration	Administrative Hearing Litigation	<b>High Degree of Administrative Formality</b>
<b>High Degree of Cooperation</b>	Unassisted Procedures (Informal Discussions, Negotiations)		Third-Party Decision Making (Administrative Hearing, Binding Arbitration, Litigation)		Nonviolent Coercion (Civil Disobedience)		<b>High Degree of Conflict</b>
<b>Low Degree of Decision-making Influence</b>	Public Information	Procedural Public Participation		Consensus Seeking Public	Participation	Negotiations/ Alternative Dispute Resolution	<b>High Degree of Decision-Making Influence</b>
	Be Informed of the Decision	Be Heard Before the Decision		Influence the Decision	Agree to the Decision		
<b>Low Degree of Agency Control</b>	Decision Maker Exchanges Information	Decision Maker Develops Agreements	Partners Develop Recommendations	Capacity Building Information Exchanges	Capacity Building Develops Agreements		<b>High Degree of Agency Control</b>
	Decision Maker Develops Recommendations	Partners Exchange Information	Partners Develop Agreements	Capacity Building Develops Recommendations			
<b>Low Degree of Agreement</b>	Outreach		Information Exchange	Collaboration & Recommendations	Agreement		<b>High Degree of Agreement</b>

Sources: Arnstein, (1969), Bisset (2000), Creighton et al. (1999), Fell and Sadler (1990), Health Canada (2000), Hughes (1998), Parenteau (1988), Praxis (1988), Smith (1993), Susskind and Madigan (1984), Westman (1985).

**Table 9.4** Examples of Methods

<i>Consultation</i>		
<i>Information Exchange</i>	<i>Continuous Involvement</i>	<i>Formal Involvement</i>
Information in (e.g., interviews, surveys, polling, focus groups, public comments, community profiling, call in television, direct e-mail, hot lines, mail-in response forms, door-to-door canvassing, responsiveness summaries, briefs, submissions, content analysis, cumulative brochures, letters to the editor, electronic chat room)	Advisory committees, councils, groups, and boards Task forces and groups People's panels Citizens' review board Breakfast meetings Community impact committee Community planning council Citizen action committees	Hearings Litigation/adjudication Referenda and plebiscites Commissions Inquiries
Information out (e.g., briefings, exhibits, displays, contact person, telephone network/phone tree, computer bulletin boards, community liaison officer, political preview, demonstration projects, document circulation, feature articles)		
Town meetings, open houses, and workshops		
Conferences, roundtables		
Contests		
Stakeholder meetings		
Ombudsperson or representatives		
Televoting, 1-800 numbers, media-based issue voting, web polls		
Workbooks and community mapping		
<i>Communications</i>		
<i>Publicity</i>	<i>Dialogue</i>	<i>Enhanced Dialogue</i>
Traditional publications (e.g., newspaper inserts, information kits, brochures, newsletters, fact sheets, mail-outs, paid advertisements, plain language communications)	Coffee klatches Kitchen table meetings Search and consensus conference Constituent assembly Roundtables Retreats	Relationship building assistance (e.g., counseling/therapy, conciliation, team building, informal social activities) Search and consensus conference Issue conference Capacity building and outreach
Audio/visual (e.g., film presentations, video, slide presentations, tape)	Computer-assisted participation and interactive www/e-conferencing Online discussion groups Participatory television/cable television Community-sponsored meetings Field offices Advice and argumentation	Technical assistance and participant funding Structured workshops Citizen employment Citizen honoraria Coordinator or coordinator catalyst Discourse ethics Combating misinformation (critical theory) Procedural justice
Media (e.g., radio and television interviews, web sites, media releases, public service announcements, press kits, newspaper inserts, news conferences)		
Information fairs/exhibits		
Translations		
Group presentations		
<i>Mutual Education</i>		
<i>Community Education</i>	<i>Proponent, Regulatory, and Specialist Education</i>	<i>Mutual Education</i>
Technical and financial assistance	Procedural training Substantive training Networking Comparable proposal and environment review Citizens' juries and panels Community profiling	Storytelling Relationship building assistance (e.g., counseling/therapy, conciliation, team building, informal social activities) Coaching/process consultation Participatory research Study circles and study groups
Citizen training		
Lectures and workshops		
Computer-based programs		
Publications and translation		
Site visits, depositories, and resource materials		

(Continued)

**Table 9.4** (Continued)

<i>Mutual Education</i>		
<i>Community Education</i>	<i>Proponent, Regulatory, and Specialist Education</i>	<i>Mutual Education</i>
Formal education, integration into existing curricula	Traditional knowledge	Participatory drama
Simulation exercises and photo-simulation	Citizen surveys	Social and collaborative learning
Citizen training programs		Transformative learning
Seminars, discussions, and position papers		Deliberative learning
Media campaigns		
Speaker's bureau and panels of experts		
Technical advisors and peer reviewers		
Demonstrations and demonstration projects		
<i>Negotiations</i>		
<i>Unassisted</i>	<i>Third-Party Assistance</i>	<i>Third-Party Decision making</i>
Informal discussion	Fact-finding	Dispute prevention
Negotiation	Conciliation and facilitation	Advisory nonbinding assistance (e.g., nonbinding arbitration, summary jury trial)
Conciliation	Mediation	Administrative hearing
Information exchange meetings	Conflict anticipation	Binding arbitration
Interest-based negotiation	Conflict assessment	Med-arb
Policy dialogue	Technical advisory board	Mediation, then arbitration
	Minitrial and nonbinding arbitration	Dispute panels (binding)
	Settlement judge and dispute review board	Private courts/judging
	Settlement conference	Litigation/adjudication
	Negotiated rule making	
	Community dispute resolution centers	
<i>Collaboration</i>		
<i>Joint and Collaborative Planning</i>	<i>Joint Management</i>	<i>Creative Collaboration</i>
Roundtables, conferences, and working groups	Comanagement boards and councils	Community visioning and shared vision planning
Cooperative/collaborative problem solving	Partnering and partnership agreements	Brainstorming, brainstorming, and brainwriting
Role-planning	Cojurisdiction	Delphi process
Joint planning	Steering committees	Nominal group process
Coalition building	Public authorities	Lateral thinking methods
Strategic choice	Community representatives on boards	Think tanks
Large-group response technique	Citizen assemblies	Active mediation
Consensus building	Community forums	Simulation, modeling, and scenario writing
Collaborative planning		Creative problem solving
Charrette		
Niagara process		
Trade-off games		
The Samoan process		
Multicriteria group decision-making models		
Constructive engagement		

Sources: Canter (1996), Creighton et al. (1983, 1999), Daniels and Walker (1996), De Bono (1992), Forester (1989, 1999), Friend and Hickling (1997), Glasson et al. (1999), Health Canada (2000b), Howell et al. (1987), Morgan (1998), Praxis (1988), SERM (undated), Sinclair and Diduck (2001), Smith (1993), Susskind et al. (1999), US DOE (1998), US EPA (2001a,b).

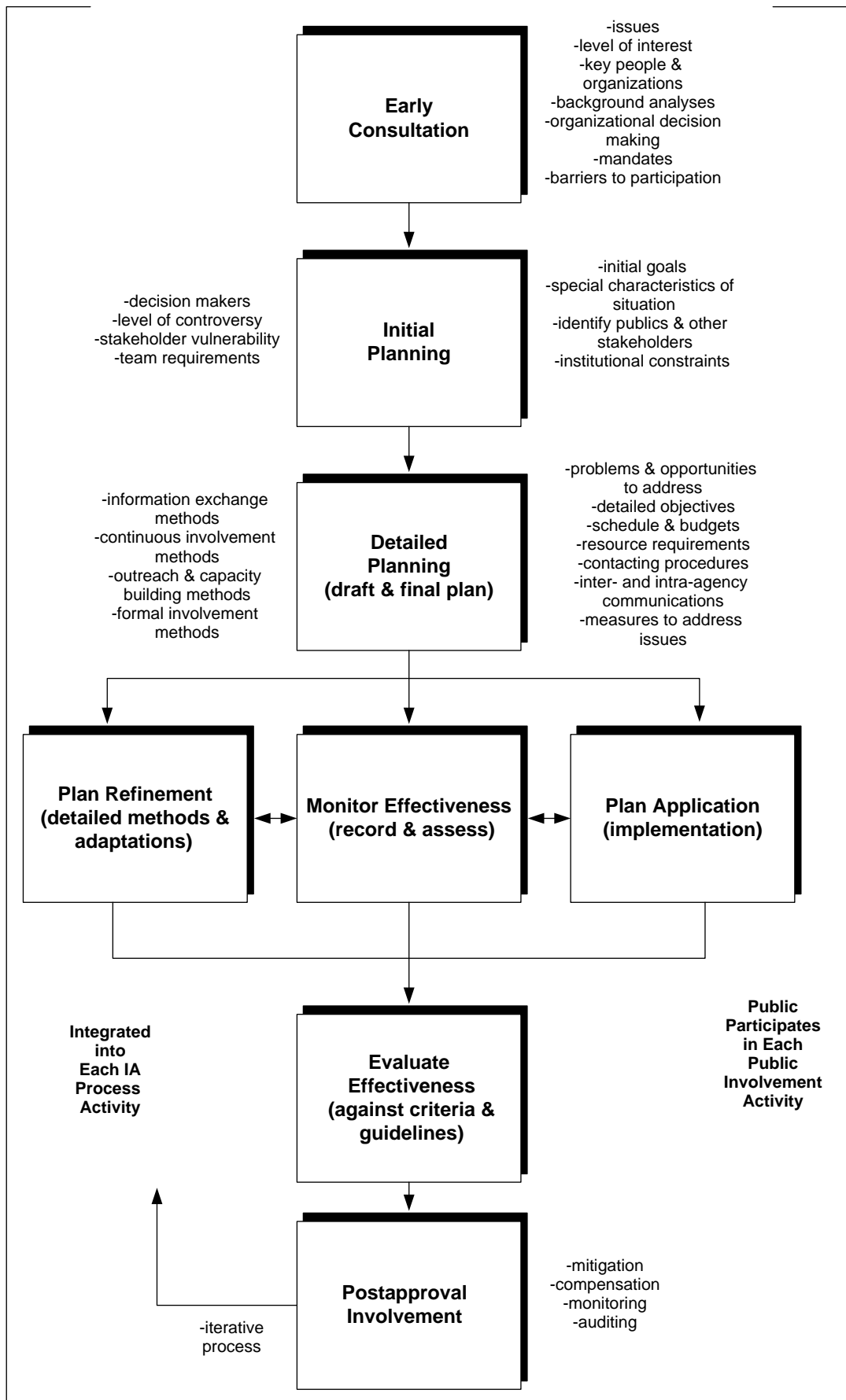


Figure 9.4 Examples of an IA public consultation process.

and segments of society can be differentiated based on, for example, location (e.g., local, regional, national), interests (e.g., industry, environment, community service), and characteristics (e.g., social, cultural, economic, political) (Bisset, 2000; Hughes, 1998; Praxis, 1988). Further distinctions can be drawn among types of individuals (e.g., community leaders, local informants, local experts, politicians, practitioners), groups (e.g., professional, environmental, cultural, recreational, service), and organizations (e.g., government agencies, businesses, institutions, media, labor unions) (Canter, 1996; Priscoli and Homenuck, 1986). There will be differences among stakeholders in the extent to which they are involved or not involved, informed or not informed, organized or not organized, united or divided and supportive, opposed to or apathetic to the proposed action (Priscoli and Homenuck, 1986; Praxis, 1988). Stakeholders, third parties, and staff can identify interested and affected parties. Geographic, demographic, historical, and comparative analyses also can help in stakeholder identification. The characteristics, perceptions, and positions of each stakeholder can be determined, appreciating that positions and alliances change, sometimes rapidly.

Detailed consultation planning generally involves preparing a draft and then a final public involvement plan. The plan is likely to characterize problems, determine objectives, establish schedules and budgets, allocate resources, establish contacting procedures, identify communications channels, and determine specific procedures for addressing identified issues (Praxis, 1988; UNEP, 1997; US EPA, 1998b). A public involvement plan can include information exchange, continuous involvement, outreach and capacity building, and formal involvement methods.

Information exchange methods provide a useful means of transmitting information to the public (e.g., newsletters, briefings, displays, background papers), of receiving information, comments, and suggestions from the public (e.g., surveys, public comments, response forms, direct e-mail), and for agencies and the public to exchange information and viewpoints (e.g., open houses, meetings, workshops). Information exchange methods can be geared to large or small audiences. If undertaken effectively, they can reach a major proportion of the population. They generally occur periodically in an IA process.

Continuous consultation methods (e.g., an advisory committee) involve a small number of stakeholder representatives. They facilitate bottom-up participation and transcend individual disciplines (Binder et al., 2010). They are inclusive and discourse-based (Bond and Morrison-Saunders, 2011). The committee meets frequently throughout the IA process. The committee can address issues, analyses, options, and trade-offs in much greater depth than is possible in information-exchange sessions (Maynes, 1989; Praxis, 1988; US EPA, 1988b). Continuous involvement is more effective when aided by facilitation and when adequately supported by influential agencies. It is ineffective if there is a lack of trust or if the viewpoints expressed through the

committee are not taken seriously (Priscoli, 1982). Continuous involvement and information exchange methods can be complementary. Continuous involvement methods can explore issues and concerns identified in information-exchange sessions. Information exchange stresses breadth of involvement. It provides a mechanism for committee “representatives” to test positions and concerns with constituency groups. Continuous involvement emphasizes depth of involvement.

Outreach and capacity-building methods help bring into the IA process traditionally unrepresented or underrepresented groups and segments of the population. Voices previously outside become central to the process (Lawrence, 2009). Outreach and capacity building can take the form of technical or financial assistance. It can entail the supply of technical resources such as phone conferences and e-mail support and the provision of translation and facilitation services (US EPA, 2001b). Such methods can enhance the capacity of organizations and groups to participate effectively in the IA process. Communities also can be empowered to leverage additional resources and to capitalize on existing civic assets (US EPA, 2001b). Outreach and capacity building can support and supplement both information exchange and continuous involvement methods.

Formal involvement methods, such as hearings, commissions, and inquiries, tend to assume the characteristics of judicial procedures. Such methods can provide a useful way of presenting and testing evidence. They are often adversarial, however, and can be intimidating to the public, especially if technical and financial resources are not made available to public groups and organizations (Maynes, 1989). Referenda and plebiscites provide a formal mechanism for testing agreements obtained through continuous involvement procedures or for obtaining public feedback on major proposals and options. Such procedures can be costly, can oversimplify complex choices, and are occasionally divisive.

Public involvement plans are not simply implemented. Refinements and adjustments occur throughout the IA process, based on an ongoing assessment of changing circumstances and of methods effectiveness (Howell et al., 1987). Public involvement procedures and the public involvement plan are merged with rather than distinct from the IA process (Burdge and Robertson, 1994). Separate consultation objectives and methods are selected and adapted to meet the requirements of each IA process activity (e.g., scoping, alternatives formulation, impact assessment) (Burdge and Robertson, 1994). The overall effectiveness of the public involvement procedures is assessed prior to approvals. This helps identify supplementary involvement measures, which should be instituted to address identified gaps and weaknesses (Wolfe et al., 2001). Public involvement extends into the postapproval period to ensure that public concerns associated with project implementation, mitigation, compensation, and monitoring are fully considered. Public involvement, in common with the overall IA process, is highly iterative (Praxis, 1988).



Public involvement procedures can establish a strong foundation for a collaborative IA process. Although necessary, they tend not to be sufficient. Although partially addressed through good practice guidance, insufficient attention tends to be devoted to the specific mechanisms by which effective two-way communications and mutual education can occur. Public involvement methods, by themselves, tend to be ineffective in avoiding, managing, ameliorating, and resolving conflicts. They also tend to neglect the development and application of specific techniques and procedures for building consensus, for creative problem solving, and for collaboratively contributing to the realization of substantive environmental objectives.

#### 9.4.4 Communications

Communications involves interactions among people. It is the bridge between environmental analysis and decision making (Holling, 1978). The communications act includes the parties involved (who), the message (what), the form by which the message is encoded (how), the audience (to whom), and a result (with what effect) (Bishop, 1975, 1983). Effective communications can facilitate understanding, conflict resolution, consensus building, and decision making. Ineffective communications can lead to a lack of understanding or to misunderstandings. It also can undermine consensus, exacerbate conflict, and inhibit decision making.

References to communications in IA literature tend to revolve around communications in IA documents and communications of good science and information to decision makers (Ayre and Calloway, 2005). Stress is placed on facilitating understanding through clear, focused, and consistent document presentation and organization (Morgan, 1998). Documents should focus on the needs and concerns of and be readily understandable to the target audience. General references also are made to developing and refining the verbal and written communications skills of IA practitioners (Daniels and Walker, 1996). Two-way communications can be furthered by process facilitators and through strong stakeholder networks (Dusik and Sadler, 2004; Kain and Söderberg, 2008; Kirkpatrick and George, 2006). Increasingly, emphasis is placed on communicating sustainability issues (Devuyst, 2000).

Table 9.5 highlights the characteristics of several communications concepts relevant to IA process management. These concepts underscore the central role of dialogue in IA practice. IA, in common with planning, is a collective, dialogic, practical, and moral activity. It is, therefore, essential to provide conditions conducive to open, unencumbered, undistorted, and noncoercive dialogue. This may require the formulation and application of mutually acceptable communicative ethical principles. IA discourses may need to be systematically analyzed. Steps may need to be taken to correct power imbalances. Ideal speech characteristics could be explicitly recognized. A concerted effort could be made to identify, avoid, and minimize communications

misinformation and distortion. Communications networks may need to be established and reinforced.

The characteristics of effective and ineffective advice giving could be considered. IA practitioners (and related procedural specialists such as facilitators) could help establish and maintain the conditions required for effective and appropriate argumentation, persuasion, and storytelling. They could provide and derive important insights from IA practice stories. They could help participants explore the characteristics of and potential for accommodating diverse arguments and stories within the IA process.

The institution of effective IA communications measures can contribute to enhanced public consultation. Such measures also are conducive to a collaborative IA process. Additional building blocks, concerned with mutual education, conflict resolution, and consensus building, however, are still required.

#### 9.4.5 Mutual Education

Education in IA practice is conventionally depicted as using information dissemination and general instruction to create public awareness of proposed actions and issues, to encourage more responsible environmental stewardship, and to facilitate informed decision making through enhanced understanding (Morgan, 1998; Praxis, 1988; SERM, undated). It is generally recognized that educational activities and programs should be jointly planned with stakeholders.

Education is sometimes acknowledged as a necessity and a precondition for advanced levels of public involvement, conflict resolution, and collaboration (Diduck and Sinclair, 1997; Maser, 1996). The IA process has been characterized as a technical, a conceptual, and a social, sustainability learning process—a process that can help communities and societies change, improve the intelligence capacity of government agencies, and further the cause of sustainability (Ebrahim, 2008; Rickson et al., 1990a; Täbara and Pahl-Wostl, 2007; Tuinstra et al., 2008).

The assumption tends to be made that learning is one way (i.e., to the public). It is sometimes recognized that proponents, regulators, and practitioners also need to receive training (e.g., in consensus building and conflict resolution techniques) and can learn much from the public. Increasingly, reference is made to the critical role of feedback, to the mutual learning and education that occurs through dialogue and debate among stakeholders, to the educational support role of computer modeling and sustainability frameworks, and to more encompassing and substantive forms of social and sustainability learning (Ayre and Calloway, 2005; Daniels and Walker, 1996; Diduck and Sinclair, 1997; Siebenhüner and Barth, 2005; Täbara and Pahl-Wostl, 2007; Tuinstra et al., 2008; Webler et al., 1995; Wiek and Binder, 2005).

Table 9.6 highlights the characteristics of various mutual education concepts relevant to IA process management. These concepts demonstrate that there are many forms of mutual learning (e.g., cognitive, communicative, social,

**Table 9.5** Examples of Potentially Relevant Communications Concepts

Dialogue	<ul style="list-style-type: none"> <li>• A form of communications in which understanding and respect are goals; intentions include maintaining social contacts and affiliation, eliciting and gaining information, promoting relationships, and changing the environment and others</li> <li>• In dialogue, participants present their own perspectives, listen carefully to the perspective of others, remain open to change, speak for selves and from personal experience, allow others to express their perspectives safely, learn significant new things about selves and others, find shared concerns with people holding different perspectives, explore doubts and uncertainties, ask questions based on true curiosity, explore the complexity of issues without polarization, and collaborate to create better futures</li> <li>• Communications process models include diffusion processes (to public), collection processes (from public), and diffusion–collection processes (information disseminated with intent of obtaining response)</li> <li>• Messages can be received at the perceptual, the cognitive, and the judgmental levels</li> <li>• Roles in dialogue: sender of message (determine own believes, motives, and beliefs); receiver of message (listening for decisions, listening with empathy, nonverbal communications)</li> </ul>
Discourse analysis	<ul style="list-style-type: none"> <li>• The frames through which groups of actors give meaning to aspects of policy issues and decisions supported by IA</li> <li>• Reflects conflicts of interests, power plays, and ways in which actors perceive and understand the world</li> <li>• Decision making conceptualized as a system of competing discourse coalitions and their struggles to control shared meanings and gain acceptance of how issues are framed</li> <li>• IA can impact upon the dominant discourses</li> <li>• Discourse analysis a useful tool for analyzing the assessment purpose and the larger sociopolitical climate; may help unravel how democracy and science guide the discussions</li> <li>• Discourse analysis allows for understanding of arguments considered legitimate or not</li> <li>• Role of IA practice in contributing to decision making by promoting stakeholder discourse reflection</li> <li>• Potential role for public participation and participatory appraisal in improving the civil legitimacy of decisions</li> </ul>
Communicative planning and action	<ul style="list-style-type: none"> <li>• Sees planning as an exercise in collective, participatory action</li> <li>• Argues that the best window onto planning practice is planning discourse; discursive interaction the most important element of planning practice</li> <li>• Recognizes that planning process may manipulate citizen action and lead to systemic distortions; systemic distortions are avoidable</li> <li>• Seeks to facilitate informed, open, unforced, and unmanipulated citizen action</li> <li>• Seeks sincere, comprehensive, and appropriate communications; self-consciously chooses actions to overcome institutional barriers and to become more egalitarian</li> <li>• Seeks a deliberative style of debating issues and interests; an open dialogue among equals</li> <li>• Principles: all important interests (identified and articulated) at table; all stakeholders fully and equally informed and able to represent their interests; all equally empowered in discussion; power differences from other contexts must not influence who can speak or who is listened to or not; allows all claims and assumptions to be tested and all constraints tested; all participants able to assess the speaker’s claims; all must speak sincerely, honestly, and comprehensively; groups should seek consensus</li> </ul>
Discourse or communicative ethics	<ul style="list-style-type: none"> <li>• Can be obstructed by social inequities and tensions and conflicts among groups; criticized as politically naïve</li> <li>• A procedural approach to moral justification; procedural morality</li> <li>• Assumes that the basic unit of meaning is the speech act, that meaning is inseparable from the role of language in structuring practices and social interactions, and that truth and normative rightness are essentially discursive matters</li> <li>• Seeks to engender ideal speech situation: freedom of access, equal rights to participate, truthfulness on the part of participants, and absence of coercion in taking positions</li> <li>• Endeavors to ensure that all relevant voices get a hearing, the best arguments given the present state of knowledge are brought to bear, and only the unforced force of better arguments determine the yes or no of participants</li> <li>• Requires that all members be prepared to listen for differences not only in interests but also in values and cultural references</li> <li>• Sets itself the tasks of deriving argumentation rules for discourse in which moral norms can be justified</li> <li>• Role of discourse ethics: to examine the normative validity of public action-guiding norms, to examine not just whether all affected participants might accept a norm but whether the norm deserves to be accepted by them, given the process in which they might consider them</li> </ul>
Misinformation	<ul style="list-style-type: none"> <li>• Various forms of misinformation impede and distort communications</li> <li>• Managing comprehension (e.g., deliberate ambiguity, jargon, ideological language, obscure messages)</li> <li>• Managing trust (e.g., false assurances, symbolic decisions, marshalling respectable personage to gain trust, ritualistic appearance of openness)</li> </ul>

**Table 9.5** (Continued)

Advice, argumentation, and persuasion	<ul style="list-style-type: none"> <li>• Managing consent (e.g., decisions reached without legitimate representation of public interest, arguing technically when acting politically, appeals to adequacy of participation, not addressing systemic failures)</li> <li>• Managing knowledge (e.g., decisions that misrepresent actual possibilities to the public before a decision is made, misrepresenting costs, benefits or options, ideological or deceptive presentation of needs)</li> <li>• Managing control (e.g., withholding information, misleading information or judgment, inconsistencies in what is being said, gaps in argumentative chain, undue persuasion, professionalization of debate)</li> <li>• Need to address and combat the effects of unequal power relations and misinformation; most misinformation avoidable even when systemic</li> <li>• Requirements of advice: relationship of persons of trust and truth, a basis in the world through knowledge and experience, expressed in reasonable and justifiable stories, and a public understanding of who we are as a community</li> <li>• Planning as a dialogic and argumentative process; involves marshalling evidence and giving reasons, minimizing the exclusion of relevant information, encouraging the testing of conjectures, and welcoming rather than punishing value inquiry</li> <li>• Planning as action in a flow of persuasive argumentation; expressed in awareness of differing or opposing views</li> <li>• Need to meander skillfully: arguing for visions, constructing inclusive processes, negotiating the meaning of key concepts, responding to unexpected events, taking existing rules and prior decisions into account (while seeking to change problematic ones), relying on own substantive knowledge (while being open to other forms of knowledge and expertise), configuring arguments (in the face of contestable configurations), and arguing persuasively in diverse media and forums</li> <li>• Argumentation affected by conflicts with others over meaning, media in which persuasive efforts occur, events that create new opportunities and constraints, institutional rules and previous decisions, legalistic procedures that inhibit understanding and innovation, social and institutional factors, and opposition to open and inclusive processes</li> <li>• Rhetorical frame (persuasive use of story and argument in policy debate) as distinct from action frame (frames that inform policy practice)</li> </ul>
Story telling	<ul style="list-style-type: none"> <li>• Planning arguments are characteristically expressed as stories</li> <li>• Stories describe events, provide explanations, warn of dangers, identify benefits, report relevant details, search for others' meanings, confess mistakes, justify recommendations, and prepare others</li> <li>• Need to understand the significance of the very messiness, complexity, detail, and moral entanglement of living stories</li> <li>• Stories are accounts of value and identity, of abiding concern, and of complexities; ignored at practical risk</li> <li>• Stories are morally thick, politically engaged, and practical</li> <li>• Seeks to enhance the capacity of participants to both listen and hear the stories of others</li> <li>• The discursive process needs to be designed to explore different storylines about possible actions</li> <li>• Suggested convergence strategy when varying stories: a pluralistic strategy; embrace rather than seeking to resolve or ignore controversy; consistent with an open moral community</li> </ul>
Networks	<ul style="list-style-type: none"> <li>• IA support role in creating and fostering cross-sectoral governance networks</li> <li>• Involves citizens and civil society organizations</li> <li>• Emphasizes constructive contributions to political pluralism</li> <li>• Enhances empowerment of participants</li> <li>• Role of self-help networks in IA capacity building</li> <li>• All participants should consider themselves equally responsible within IA networks</li> <li>• Social network properties include greater awareness, competence, and capacity to increase decision making through IA</li> </ul>

*Sources:* Bishop (1983), Bonifazi et al. (2011), Dusik and Sadler (2004), Fischler (2000), Forester (1989, 1999), Habermas (1993), Healey (1997), Hodge (2004), Huxley and Yiftachel (2000), Innes (1998), Krieger (1981), Lauria and Soll (1996), Mandelbaum (1991), Patton et al. (1989), Rozema et al. (2012), Runhaar (2009), Schön and Rein (1994), Sager (1994), Taylor (1998), Throgmorton (2000).

practical, collaborative, transformative, critical, emancipatory, organizational, deliberative, sustainability, traditional knowledge) possible in IA practice. They illustrate how mutual learning integrates the cognitive, the moral, and the practical. They demonstrate how knowledge is brokered. They indicate how it can be facilitated (e.g., by the expert elicitation process). They show how learning can be approached from

multiple perspectives, how it varies depending on the historical, social, and cultural context, and how it integrates and transcends such distinctions as personal and processed knowledge, facts and values, and people and the environment.

Mutual learning is interactive, social, reflective, critical, practical, affective, holistic, collaborative, deliberative, and democratic. It facilitates learning about facts, values, issues,

**Table 9.6** Examples of Potentially Relevant Educational Concepts

Mutual education	<ul style="list-style-type: none"> <li>• No single party, organization, or discipline holds the key to understanding; therefore, mutual learning critical</li> <li>• Types of learning: about what is (facts and explanations), about what should be (values), and about participants</li> <li>• In mutual learning, personal experiential and processed knowledge are integrated</li> <li>• Ideal conditions for learning: accurate and complete information, freedom from coercion, openness to alternative perspectives, ability to reflect critically upon presuppositions, equal opportunity to participate, and ability to assess arguments in a systematic manner and to accept rational consensus as valid</li> <li>• Learning involves various thinking modes (e.g., concrete experience, reflective observation, abstract conceptualization, active experimentation); combined to form learning dialectics</li> </ul>
Communicative and social learning	<ul style="list-style-type: none"> <li>• Social learning: the process of framing issues, analyzing options, and debating choices in the inclusive deliberation</li> <li>• Occurs when citizens involved in working out mutually acceptable solutions mature into responsible democratic citizens and reaffirm democracy</li> <li>• Views IA as a vehicle for social and individual learning</li> <li>• Distinction between cognitive learning (where knowledge is a dominant variable) and social learning (based on responsive communications leading to the reframing of a policy issue)</li> <li>• Two general component of social learning: cognitive enhancement (i.e., the acquisition of knowledge) and moral development (i.e., growth in the ability to make judgments about right and wrong)</li> <li>• For social learning to occur there must be a free expression of attitudes, feelings, and intentions</li> <li>• No predetermined outcomes; supported by information from multiple perspectives, citizens add value, there are serious and substantive discussions, and discussions are supported by neutral facilitators</li> </ul>
Organizational learning	<ul style="list-style-type: none"> <li>• IA can provide opportunities for organizational learning</li> <li>• Involves examination of information sharing, information interpretation, organizational memory, and learning outcomes</li> <li>• Organizations have a variety of structures that facilitate learning</li> <li>• Can be single-loop (improving performance within the existing system) or double-loop (changes the system)</li> <li>• Seeks to enhance organizational structures and procedures to foster learning</li> <li>• IA process can foster organizational learning (e.g., accurate information, freedom to participate, freedom from coercion)</li> <li>• Need to consider how organizational structures and dynamics facilitate or inhibit learning</li> </ul>
Practical and deliberative learning	<ul style="list-style-type: none"> <li>• Practitioners learn and reflect as they act with others in practical situations</li> <li>• Practitioners reflect in action, make moves, evaluate results of moves, and reconsider working theories; practice can lead theory; theory and practice integrated</li> <li>• Practitioners learn alone or from or with others; can learn from systematic studies and by listening to practice stories from thoughtful practitioners; deals explicitly in the everyday language of practical life</li> <li>• Double visioning: ability to act from one perspective while holding awareness of other possible perspectives</li> <li>• Reflective transfer: the process by which patterns detected in one situation are carried over as projective models to other situations where used to generate new causal inferences and are subjected to new, situation-specific validity tests</li> </ul>
Collaborative learning	<ul style="list-style-type: none"> <li>• Sees IA as a learning and civic discovery process where people act together and find new solutions</li> <li>• Designed to address complex and controversial issues; combines elements of systems methods, mediation/dispute management with experiential learning theory</li> <li>• Process: introduction to process, identify situation to be improved, share situation perceptions and description, dialogue about interests and concerns, develop transformative models, compare models with reality, and collaborative arguments about desirable and feasible change</li> <li>• Emphasizes learning and negotiation interaction as the means through which learning and progress occurs</li> <li>• Attributes: stresses improvement (rather than solution), situation (rather than problem or conflict), concerns and interests (rather than positions), systems thinking (rather than linear thinking); recognizes that considerable learning about science, issues, and values will have to occur before implementable improvements are possible</li> </ul>
Critical, emancipatory, and transformative learning/critical IA education	<ul style="list-style-type: none"> <li>• Critical pedagogy: accepts the transformative possibilities of willed human action on an individual and social level; student centered with emphasis on democratic dialogue</li> <li>• Major descriptors of critical pedagogy: participatory, situated (in student thought and language), critical, dialogical, desocializational (students desocialized from passivity in classroom), multicultural, research oriented, activist (classroom is active and interactive), and affective (interest in broad development of human feelings)</li> <li>• Transformative theory of social learning: explores not only how our arguments change in dialogue and negotiations but how we change as well; transforming ends, ideas, and ourselves</li> <li>• Transformative learning: a comprehensive theory of how adults learn; focuses on learning process and accommodates social context; describes how individuals improve instrumental (how to control and manipulate</li> </ul>

**Table 9.6** (Continued)

	<p>the environment) and communicative competence (trying to understand what someone means when they communicate)</p> <ul style="list-style-type: none"> <li>• Learning not just through arguments, reframing of ideas, and critiques of expert knowledge; also through transformations of relationships, responsibilities, networks, competence, and collective memory and memberships</li> <li>• Critical IA education encompasses both education about IA and education through IA; includes education about project, environment, how decision-making processes and project decisions can be challenged, and how members can work together to pursue their own goals</li> <li>• Critical IA education: contributes to human democratic liberation, to assessment activities, and to fostering of critical consciousness (enables public to evaluate dominant discourse and to present forceful counterarguments)</li> </ul>
Sustainability learning	<ul style="list-style-type: none"> <li>• Focuses on generating and applying a specific type of content of what is learned</li> <li>• Learning to develop the capacity to manage options for the adaptation of human societies to the limits and changing conditions that are imposed on socioecological systems</li> <li>• Seeks to overcome such dualisms as individual and collective, human and natural systems, structure and change, internal and external system properties, human agency and natural conditions</li> <li>• Advocates a more hybrid, relational, and coevolutionary holistic understanding of human–natural interactions</li> <li>• Citizenship encompasses transcendence of human spirit for a self-sustaining humanity on a life-supported planet</li> </ul>
Knowledge brokerage	<ul style="list-style-type: none"> <li>• Involves designing opportunities to facilitate knowledge exchange and transfer as part of IA process</li> <li>• IA can serve role as platform for knowledge brokerage, identifying and bringing together people interested in an issue and helping develop evidence-based solutions</li> <li>• Needs an appropriate range of stakeholders, resources, time and space for open dialogue, and nonjudgmental environment in which exchanges can take place</li> <li>• Role of IA to facilitate processes and mutual learning and sharing</li> <li>• Can help build stakeholder capacity</li> </ul>
Expert elicitation process	<ul style="list-style-type: none"> <li>• Method promotes collaboration between key scientists and policy makers</li> <li>• Requires careful planning, implementation, and documentation</li> <li>• Utilizes professional knowledge, experience, and judgment</li> <li>• Involves meetings of environmental experts to identify VEC goals and measures to achieve</li> <li>• Identifies need, selects study leader, identifies issues to address, selects experts and peer reviewers, prepares premeeting materials and disseminate, conducts meetings and document outputs</li> <li>• Can be used for promoting environmental sustainability and for impact management planning and implementation</li> </ul>
Traditional knowledge	<ul style="list-style-type: none"> <li>• A cumulative, dynamic body of knowledge, practices, and beliefs about the relationship of living beings with one another and their environment handed down through generations by cultural transmissions; biophysical, cultural, and cosmological; represents a cognitive spiritual awareness based on the relationship of indigenous people and their environment</li> <li>• Acquired from experience, culture, or interactions with land or resources over time</li> <li>• Built up over time and continuing into the present, by people living in close contact with the natural environment</li> <li>• An attribute of societies with historical continuity of resource use practices (generally indigenous or tribal); is unique to each tradition and is closely associated with a given territory; varies among different indigenous societies</li> <li>• Usually linked to a belief system that stresses respect for the natural world; takes a holistic perspective which stresses the place of humans with the natural system; four perspectives: taxonomic, spatial, temporal, and social</li> <li>• Oral communications; taught through observation and experience; explained based on spiritual and social values</li> <li>• Can assist with building relationships between proponents and indigenous peoples; barriers—perceptual, skepticism of scientific community, and political obstacles; needs to be controlled at the community level</li> <li>• Fosters meaningful indigenous participation in IA; an IA process where scientific and traditional knowledge is balanced</li> </ul>

*Sources:* Berkes (1993), BC EAO (2001), Brascoupé and Mann (2001), Daniels and Walker (1996), Diduck and Mitchell (2003), Fitzpatrick (2006), Forester (1999), Gadgil et al. (1993), Healey (1997), Johannes (1999), Landry et al. (2009), Mezirow (1994), Noble (2009b), Paci et al. (2002), Saarikowski (2000), Schön and Rein (1994), Sheate and Partidário (2010), Sinclair and Diduck (2001), Sköllerhorn (1998), Swor and Canter (2011), Tåbara and Pahl-Wostl (2007), Webler et al. (1995).

decision-making processes, and the participants in the process. It can further democratic values. In IA it encompasses environmental, organizational, political, and societal perspectives (Faber et al., 2010). Participants in mutual learning are transformed by the experience. Mutual learning is conducive to learning about and through the IA process. It is more likely to occur when supported by accurate information and a noncoercive environment. Third parties, such as facilitators, can help participants adapt and apply mutual learning.

Mutual learning concepts, coupled with more conventional educational methods, such as the training of participants, can contribute to more collaborative IA processes. Education in and through IA broadens and reinforces the base established through public involvement and communications measures. Additional measures, however, are needed to address conflicts, to build consensus, and to advance substantive environmental goals.

#### 9.4.6 Negotiations

Negotiation in IA practice is based on a conflict and interest-oriented view of society. Negotiations can be aided or unaided. Aided negotiations can follow the route of litigation through the courts or can employ alternative dispute resolution (ADR) mechanisms. This analysis focuses largely on the potential roles of various forms of ADR in the IA process. It does not preclude unaided negotiations. It also recognizes that ADR tools can be applied for purposes other than avoiding, managing, and resolving conflict.

ADR is based on the theory that the people involved in a controversy, because they know their own needs and interests, are best able to develop reasonable and lasting solutions (US EPA, 2000a). ADR is voluntary and flexible (Bingham and Langstaff, 1997). It involves stakeholders discussing differences and working together as a group to solve problems or to address issues (SERM, undated). Neutral third parties (e.g., a facilitator, a mediator) often assist the parties in reaching mutually acceptable accommodations. Third parties (e.g., active mediation) are not always neutral. They can help ensure equitable procedures and fair, enduring, and environmentally sound outcomes (Susskind and Madigan, 1984). Authorities retain final decision-making authority with some forms of ADR (e.g., facilitation, mediation) but not with others (e.g., binding arbitration) (Susskind, 1999). Parties to the process are not contractually liable for their actions during negotiations (McGlennon and Susskind, undated). ADR seeks to avoid, mitigate, and resolve conflict, without resorting to litigation and where existing administrative procedures are ineffective (US EPA, 2001a).

ADR has been applied in many situations (e.g., adjudication, rulemaking, policy development, enforcement actions, permit issuance, contract administration, IA) (US EPA, 2001a). The types of conflicts, which can be addressed through ADR, are many and diverse. They can, for example, concern resource allocation, policy priorities, jurisdiction,

environmental quality standards, data, values, interests, and relationships (Campbell and Floyd, 1996; Moore, 1986; Priscoli, 1999). Conflicts can be perceived or latent (whether parties conscious of), manifest or potential (whether taking place), real or displaced (whether actors correctly conceive), system dependent or independent (whether generated internally or externally), zero or variable sum (win lose or win-win potential), cooperative or noncooperative (information exchange and coalition building potential), means or ends oriented (objectives or instruments), formal or informal, institutionalized or ad hoc (Sager, 1994). Conflicts can also be characterized based on the number of parties involved, the types of parties involved, and the extent to which there is agreement regarding goals and problem definition (Priscoli, 1999). Outcomes from ADR can include pacification, settlement (i.e., procedural accommodation), or solutions (i.e., substantive improvements) (Sager, 1994).

ADR is not always appropriate. It should be possible to identify and include all relevant parties. All parties must be willing and able to voluntarily come to the table, to negotiate in good faith, and to reach a settlement on behalf of their constituents. Each party should formally accept ADR as potentially preferable to either not participating or to litigation (i.e., they gain some value) (Amy, 1987; Bingham, 2001; Susskind et al., 1999). The agency with final decision-making responsibility should support the process. The participants should be prepared to accept the negotiating ground rules and the negotiating structure (Bingham, 2001). The issues should have crystallized or “ripened” to the point that a common purpose can be agreed to, alternative courses of action can be determined, trade-offs and compromises can be identified, and solutions capable of joint acceptance are possible (Amy, 1987). Agreements reached through negotiations should be reasonable and capable of implementation (Moore, 1999). Legal challenges should be unlikely (Rodwin, 1982). ADR is not a good idea if policy precedents are likely to be set or if unacceptable environmental conditions could result (Bingham, 2001; Moore, 1999). ADR is very difficult, but not impossible, when there are fundamental clashes of values or principles.

It should be possible to ensure a relative balance of power among the parties (Amy, 1987; Armour and Sadler, 1990). Adequate resources and relevant data should support the process. There should be a deadline and some urgency for a decision (Bingham, 2001; Moore, 1999). There must be sufficient time for consensus building (Susskind et al., 1999). Third-party support (e.g., facilitation, mediation) and training for participants (if needed) should be available (Emond, 1990; Susskind et al., 1999). It should be possible to address both technical and nontechnical issues. Information should be freely shared among the parties (Bingham, 2001). It should be possible to create a clear map outlining how consensus is to be built (Susskind et al., 1999). Communications with broader interests should be maintained throughout the process (Bingham, 2001). Final agreements should be written and signed by each participating party

representative. The resulting document should be legally binding and enforceable. Opinions vary as whether the process should be transparent or confidential (Emond, 1990; Bingham, 2001).

Figure 9.5 highlights some potential characteristics of an ADR process. The process starts with an overview of the factors (e.g., issues, range of parties) that determine whether ADR is possible, appropriate, and timely compared with the available alternatives (such as litigation or conventional administrative procedures). It may be desirable to formalize this review in a conflict assessment (Susskind, 1999). Parties associated with each interest are identified. Credible representatives for each party are determined and recruited (Susskind and Madigan, 1984). Funding commitments are obtained (Susskind, 1999). Assurances are sought that decision makers will take the process outcomes seriously and will allow sufficient time to ensure a sincere consensus-building effort. Procedural rules for the process are drafted and refined in consultation with parties. An overall strategy or plan is formulated and refined (Moore, 1999). The strategy addresses such matters as schedule, timing, resource requirements, training needs, communications methods, third-party assistance needs, roles and responsibilities, contacting procedures, decision-making links, and procedures for maintaining communications with constituents (Susskind, 1999). A mediator or facilitator is identified, together with a recorder (Susskind and Madigan, 1984). An agenda for the initial negotiations session is prepared (Moore, 1999).

The negotiations process is highly iterative but appears to coalesce into four overlapping steps: (1) initial deliberations, (2) focusing, (3) detailed deliberations, and (4) final refinements. During initial deliberations, the underlying interests of each party are identified, background data are obtained and exchanged, the negotiations skills of participants are enhanced (where necessary), the committee structure is determined, supplementary data collection, analysis, and review (i.e., joint fact-finding) takes place, the concerns and priorities of each party are identified, initial concept statements are formulated, and general efforts are made to build trust, rapport, and cooperation among the parties (Moore, 1999; Susskind, 1999). Focusing involves identifying key issues, determining points of agreement and disagreement, establishing the scope and boundaries for the negotiations' packages, identifying possible negotiations packages, generating texts to focus discussions, and excluding clearly unacceptable packages (Moore, 1999; Susskind, 1999). In detailed negotiations, packages are presented, concessions and commitments are advanced and traded, the consequences of the packages are determined, the packages are evaluated and possibly combined, solutions are sought which are mutually acceptable and which will maximize joint gains, measures are identified to prevent and offset negative features, a preferred package or package combination is identified, and commitments are obtained from each party to the preferred package (Susskind and Madigan, 1984). Final refinements elaborate on the

preferred package to add implementation, monitoring, compensation, and postnegotiations evaluation provisions. A reopener or dispute resolution mechanism is often included (Susskind, 1999). The final package is prepared in a form suitable for signing by the parties. The parties are held responsible for signing the agreement.

During negotiations, the parties are expected to be responsible (act in good faith), open (all concerns explicit), respectful (all heard and taken seriously), trustworthy (nothing held back, no hidden agendas), fair (power inequities offset), flexible (discussion based on interests rather than predetermined positions), and constructive (search for outcomes that meet and further the interests of all) (Innes, 1996; Innes and Booher, 1999; Praxis, 1988; Susskind, 1999). The parties should strive for but not insist on consensus (Nagel, 1987). Consensus can be either unanimity (a good idea but not always practical) or overwhelming agreement (in contrast to a bare majority) (Susskind, 1999). During negotiations, authority does not have to be given up (any party can walk away at any time) and principles and interests need not be abandoned (the process seeks solutions which respect and further the interests of each participant) (Susskind et al., 1999). A third party, such as a facilitator or a mediator, can assist in consensus building, conflict resolution, and joint problem solving (Smith, 1993). A record of the process should be kept (Susskind, 1999). As the process unfolds it may be necessary to revisit earlier stages.

Implementation can involve ratification by constituents. The parties are held to their agreements (Susskind and Madigan, 1984). It may be necessary to ensure that informal agreements are incorporated into formal mechanisms. The provisions of the agreement need to be implemented. Implementation should be monitored and evaluated. Monitoring results may necessitate renegotiations or modifications to elements of the agreements. The lessons and insights obtained through negotiations and monitored should be incorporated into the organizational learning mechanisms of the process participants (Susskind, 1999).

Conflicts or potential conflicts, which might warrant ADR, can arise at any stage in the IA process where interests, values, or perspectives might clash (e.g., scoping, significance interpretation, impact management). They can concern the design and execution of public participation activities. They can occur both prior and subsequent to approvals. They can pertain to procedure or to substance. ADR procedures can help avoid conflict and scope issues when instigated near the outset of the IA process. They can help keep the process "on track" when dealing with difficult interpretative issues such as alternatives evaluation and impact significance interpretations. They can help bring the process to a successful conclusion when dealing with troublesome issues surrounding mitigation, compensation, monitoring, and implementation. ADR can represent an alternative to or can scope a hearing or court action.

Various ADR methods may be appropriate at different stages in the IA process. Table 9.7 lists examples of

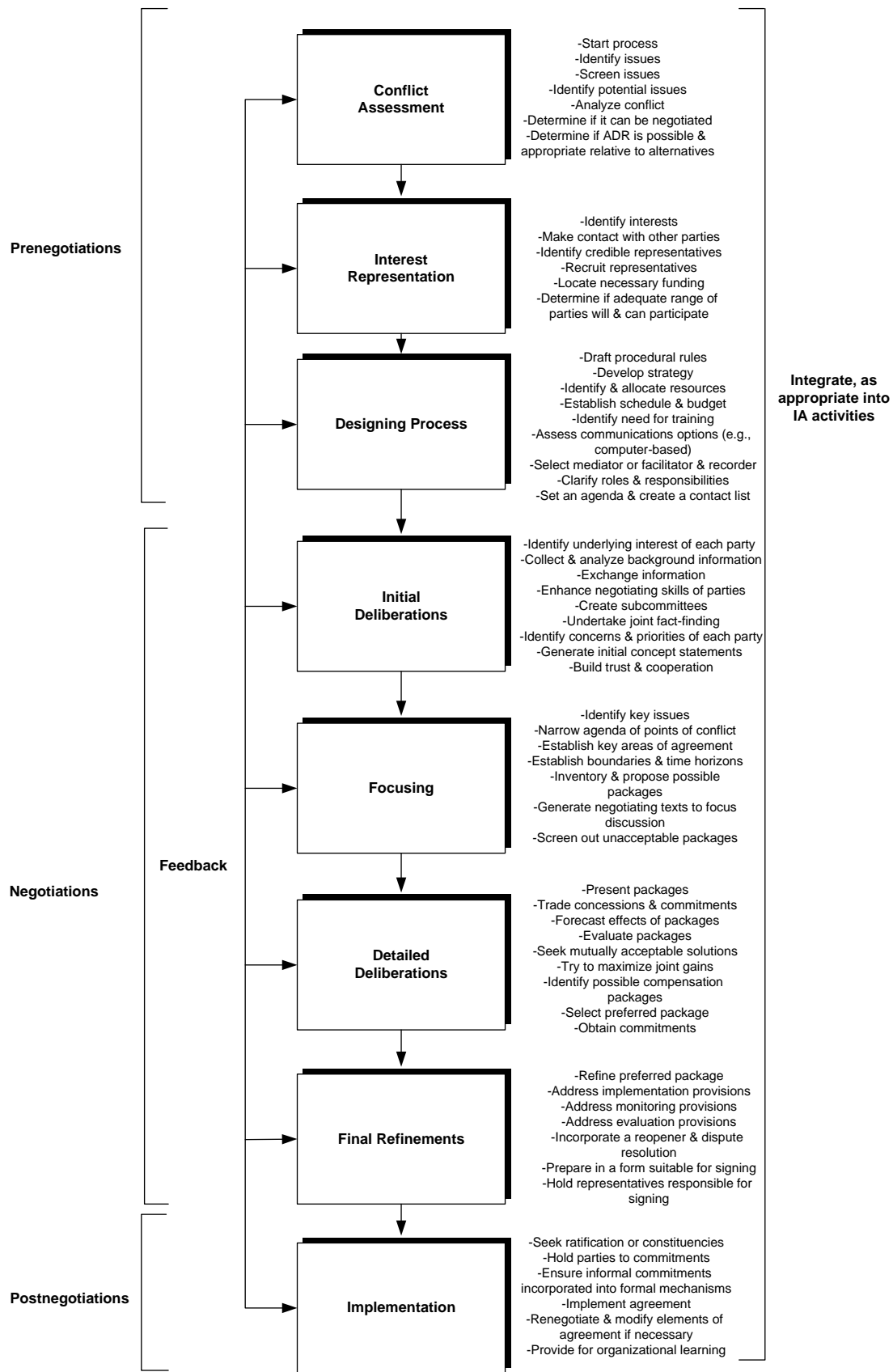


Figure 9.5 Example of an ADR process.



**Table 9.7** Examples of Negotiations, Methods, and Mechanisms

Unaided negotiations	<ul style="list-style-type: none"> <li>• Contending parties work out differences without help</li> <li>• Distinction between position (each side argues from positions) and interest (alternative solutions that meet interests or needs) negotiations</li> <li>• Differences resolved based on compromise or interest-based principles</li> <li>• Informal: serves to soften hard positions, explore underlying interests, develop options, and reach a mutually acceptable resolution</li> </ul>
Conflict theory anticipation, assessment, and management	<ul style="list-style-type: none"> <li>• Conflict theory: identifies different interests, distributional effects, and possible strategies to alleviate</li> <li>• Dispute prevention: third party identifies potential disputes before opposing positions fully identified</li> <li>• Involves communications, building personal relationships, and establishing procedures for addressing issues before they become disputes</li> <li>• Conflict assessment: a document that spells out what the issues are, who are the stakeholders, where they disagree and where they find common ground; usually prepared by a neutral outsider based on confidential interviews with key stakeholders</li> <li>• Potential role for SIA in managing conflicts, utilizing conflict mediation methods</li> <li>• Allows the assessor to explore the parties' incentives and willingness to negotiate in good faith; creates an opportunity for the assessor to educate stakeholders about what it takes to bring consensus process to successful conclusion</li> <li>• Produces recommendations regarding who has a stake, what issues are important to stakeholders, and whether it makes sense to proceed given constraints and circumstances</li> <li>• Phases: introductions, information gathering, analysis, process design, report writing, and report distribution</li> </ul>
Information exchange and joint fact-finding	<ul style="list-style-type: none"> <li>• Information exchange meetings: parties share data and check out perceptions of each other's issues, interests, positions, and motivations in an effort to minimize unnecessary conflicts over facts</li> <li>• Used to establish a shared framework for analyzing a dispute, resolving disputes on matters of fact, and clarifying disagreements of fact</li> <li>• Fact-finding can be used in scientific, technical, or business disputes in which knowledge is highly specialized</li> <li>• A third-party subject matter expert is chosen by the parties to act as a fact-finder or independent investigator</li> <li>• Can identify facts and areas of agreement and disagreement; expert then submits a report or presents the findings</li> </ul>
Conciliation	<ul style="list-style-type: none"> <li>• Neutral party, generally with no stake in the dispute, to informally communicate separately with disputing parties for the purposes of reducing tensions, build trust, and agreeing on a process for resolving the issue</li> <li>• Attempts to assist negotiators in searching for accommodations</li> <li>• Helps establish a basis for direct negotiations</li> </ul>
Facilitation	<ul style="list-style-type: none"> <li>• Facilitator: a nonpartisan or neutral trained specialist who helps people design effective meetings and problem-solving sessions and then acts as the meeting leader on behalf of the group; does not have the authority to make substantive decisions on behalf of the group</li> <li>• Focuses on process and uses available tools to create and foster an environment conducive to joint problem solving</li> <li>• Assists parties in coming together to exchange views, share information, and clarify differences; helps promote meetings that are purposive, efficient, productive, and civil</li> <li>• Examples of responsibilities: taking care of meeting logistics, reminding parties of ground rules, intervening when someone violates the ground rules, keeping discussion on track and schedule, summarizing and focusing discussion, identifying key points, clarifying issues and interests, orienting the group to objectives, promoting effective communications, eliciting creative options, and maintaining a nonthreatening environment that encourages people to participate</li> </ul>
Mediation	<ul style="list-style-type: none"> <li>• Involves the intervention of an acceptable, impartial, and neutral third party, who has no decision-making power, to assist contending parties in voluntarily reaching their own mutually acceptable settlement of issues</li> <li>• Mediator is only concerned with process issues, works hard to ensure that process is fair and unbiased in the eyes of the parties at the table; process is voluntary, informal, and confidential</li> <li>• Assists in clarifying issues, facilitating information collection, exchange and evaluation, identifying key issues, uncovering hidden interests, designing an effective negotiations process, developing options for dispute resolution, and helping to identify and formulate areas of agreement</li> </ul>

*(continued)*

Table 9.7 (Continued)

Minitrial, dispute review board, or disputes panel	<ul style="list-style-type: none"> <li>• Mediation process: decision to start, mediator contacts parties and outlines process and logistics, mediation meetings held, mediator's report is prepared and report signed by parties and submitted to approving authority</li> <li>• Conventional mediator: no stake in outcome; active mediator: works hard to ensure that process is fair, unbiased, and open to all parties affected by the outcome, whether they sit or do not sit at negotiating table, seeks to ensure that the outcome is viewed as fair by the community at large, is reached efficiently, and remains stable after bargaining</li> <li>• Minitrial: expedited presentation of positions and evidence to a panel composed of senior decision makers representing each participant and a third party; authorized representatives hear case and negotiate agreement; parties can present summary proofs and arguments; third parties can advise, mediate, or make advisory opinion</li> <li>• A voluntary, expedited, nonjudicial, informal, and confidential procedure; used to address complex technical issues where litigation costs would be high and senior decision makers want maximum control of terms of settlement</li> </ul>
Inquiries, public hearings, and adjudication	<ul style="list-style-type: none"> <li>• Dispute review board or dispute panel: provides the parties with an objective evaluation of the dispute by fully qualified experts; opinion of the board is advisory, with the parties negotiating a final resolution</li> <li>• Formal judicial or quasijudicial proceeding; parties meet in an adversarial setting before an impartial judge or panel</li> <li>• Can ensure thorough presentation and testing of evidence; can address issues not suitable for or remaining after ADR</li> <li>• Can be intimidating, time-consuming, and expensive</li> <li>• Can exaggerate conflicts; encourages people to take positions rather than share fundamental interests or to engage in problem solving; sets up a "win-lose" situation</li> </ul>
Arbitration	<ul style="list-style-type: none"> <li>• Parties select a neutral individual or panel with expertise on issues at dispute and set rules or norms to apply</li> <li>• Parties (or counsel for each party) present their case (facts, positions, and formal arguments); arbitrator recommends a basis for settlement</li> <li>• Nonbinding arbitration: parties are not bound to submit to arbitrator's decision; but advise normally carries a great deal of weight</li> <li>• Binding arbitration: parties agree to live by arbitrator's decision even if they are unable to reach a voluntary decision themselves</li> <li>• Each party seeks to design the most reasonable outcomes for presentation to arbitration; emphasis on design rather than argument</li> <li>• Results in an unbiased judgment, avoid problems of litigation, prevents loss of face, and encourages a decision</li> </ul>
Negotiated rule making	<ul style="list-style-type: none"> <li>• A process of bringing together representatives of various interest groups and a government agency to negotiate the text of a proposed rule; goal is for the committee to reach consensus on the text of a proposed rule</li> <li>• Parties need to perceive that transaction costs of developing, implementing, and enforcing regulations in the usual fashion are high and that significant costs savings are possible from a different approach</li> <li>• Involves convening the appropriate parties, clarifying roles and responsibilities regarding consensus-based decision-making process, reaching and testing the scope of the agreement (joint problem solving and fact-finding, option development and evaluation, selection of a preferred option), and binding parties to their commitment (draft rule published and subject to comment period)</li> </ul>
Negotiated environmental agreements	<ul style="list-style-type: none"> <li>• Involves negotiated agreements between proponents and communities/indigenous peoples</li> <li>• Commits monetary and nonmonetary return back to community (e.g., direct and indirect employment, local procurement, financial payments)</li> <li>• Facilitates communications and community-industry partnership</li> <li>• Formalizes public role and pre and postapproval decision making</li> <li>• See enhancement as core means converting project risks into sustainability opportunity</li> <li>• Culturally appropriate enhancements</li> <li>• Addresses such matters as community benefits and impact management</li> <li>• Help engage stakeholders and build local capacity and empowerment of beneficiaries</li> </ul>

Sources: Bingham (1986, 2001), Bingham and Langstaff (1997), Burdge (2004), Campbell and Floyd (1996), Creighton et al. (1999), De Bono (1992), Esteves and Barclay (2011), Esteves et al. (2012), Forester (1999), Lowry et al. (1997), Morgan (1998), Moore (1999), Noble and Birk (2011), O'Faircheallaigh (2010), Peltonen and Sairinen (2010), Rowan and Streather (2011), Sager (1994), Smith (1993), Susskind and Madigan (1984), Susskind et al. (1999), Weber (1998), Westman (1985).

negotiations and ADR methods and mechanisms. The methods vary in the roles they can perform (e.g., conflict avoidance, fact-finding, determining if ADR is practical, expediting meetings, problem solving, dispute resolution, the siting of “locally unwanted land uses”). They also vary in the role of participants, in the formality of proceedings, in the degree of confidentiality, and in the types of situations into which they are applied. The application of ADR methods in IA should take into account these differences, general ADR characteristics, strengths and limitations, the specific characteristics, strengths and limitations of individual ADR methods, and the match between methods and context.

ADR methods have had considerable success in contributing to settlements (Creighton, 1999; Sipe and Stiffler, 1995). Participants tend to be very satisfied with the process (Sipe and Stiffler, 1995). ADR has been effective in identifying the rationale for settlements (Creighton, 1999). It is often faster and less costly than litigation (Campbell and Floyd, 1996; Harashina, 1995). It is credited with building and enhancing relationships, facilitating higher quality decisions, identifying and solving conflicts and problems, furthering procedural and substantive equity, enhancing the likelihood of approvals, implementation, and compliance, and contributing to stakeholder empowerment (Campbell and Floyd, 1996; Creighton et al., 1999; Harashina, 1995; Innes and Booher, 1999; Harrop and Nixon, 1999; Smith, 1993; Smith et al., 1997). Managers often favor ADR because it is voluntary, nonjudicial, confidential, and does not necessitate control delegation or sharing (Creighton et al., 1999). Stakeholders may prefer ADR because it is informal, nonintimidating, and conducive to joint problem solving.

There are, however, many situations, as noted earlier, where ADR is inappropriate or impractical. Some suggest that agreements reached through ADR tend to be vague and general (Neuman, 2000). It is feared that, by operating on the fringes of institutional structures, ADR will either be ineffective or will undermine representative democracy and state intervention (Fischler, 2000; Neuman, 2000). ADR, it is argued, could lead to ethical, democratic, or environmental sacrifices if objectives, principles, or interests are compromised in the quest for consensus (Smith, 1993). Citizens may find themselves at a disadvantage because of imbalances in training and expertise (Smith, 1993; Smith et al., 1997). They may find the time commitments too onerous (Canter, 1996; Smith, 1993). They may resist the need for coalitions with other interests. They may fear co-optation (Canter, 1996). Agencies could be reluctant to participate because ADR is inconsistent with their conventional operating procedures (Manring et al., 1990; Smith, 1993). They may hesitate to involve others in decision making on the grounds that they will lose control or that they will be opening up their decision-making processes to scrutiny and legal challenges (Bingham and Langstaff, 1997). They too may lack negotiating skills and experience. ADR could run counter to the financial interests of outside counsel. Some

argue that it is difficult to enforce implementation and monitoring requirements obtained through ADR (Smith, 1993).

The many ascribed benefits of ADR are, according to some, overstated (Bingham, 2001). While acknowledging that ADR has a high settlement rate, they suggest that it does not necessarily result in a higher compliance rate (Sipe and Stiffler, 1995; Sipe, 1998). Each ascribed ADR benefit, it is suggested, should be treated as a success measure and should be systematically tested against experience (Bingham, 2001). ADR brings parties together to resolve disputes and to solve problems. Disputes are frequently resolved. Most ADR disadvantages and constraints can, with judicious application and a heightened awareness of potential pitfalls and limitations, be avoided or ameliorated. It is less apparent whether and how ADR generates creative solutions to problems or proactively generates “win-win” options and opportunities, which move beyond the reconciliation of interests (De Bono, 1992). The specific techniques for creative collaboration are not well developed in ADR. It is possible that groups, by relying excessively on the skills of facilitators and mediators, will be slow to develop or to apply their own collaborative skills (De Bono, 1992). ADR, applied appropriately and in the right circumstances, can assume a vital role in IA public participation. But alternative approaches and a wider range of creative methods are likely needed before an IA process can be said to be fully collaborative.

#### 9.4.7 Collaboration

Collaboration is about people cooperatively working together in a joint endeavor with substantive aspirations. The orientation, with collaboration as compared with negotiations, shifts from interests and positions to perspectives, from problems to visions and opportunities, from conflict management to creative exploration, and from negotiations to collaboration. Negotiations may (or may not) be an element of or precede collaboration. Collaboration can build on a base of but is more than the sum of effective consultation, communications, mutual education, and negotiations. Effective collaboration transcends the other elements of IA participation.

Table 9.8 highlights the characteristics of several collaborative concepts relevant to IA process management. Some concepts, such as joint fact-finding, active mediation, and consensus building, also are used in negotiations. Others, such as procedural justice, closely parallel such related communications and educational concepts as discourse ethics. These commonalities underscore the many interactions among IA participation elements. Collaboration encompasses, integrates, and transcends involvement, communications, mutual education, and negotiations.

The concepts exhibit numerous ideal collaborative process characteristics. Collaboration, for example, should be inclusive. It should include multiple interests, issues, values, and perspectives within a multistakeholder planning system

**Table 9.8** Examples of Potentially Relevant Collaboration Concepts

Joint fact-finding	<ul style="list-style-type: none"> <li>• Information exchange: parties share data and compare perceptions, perspectives, and motivations</li> <li>• A fact-finder is an independent expert chosen by the parties to conduct investigations</li> <li>• Fact-finders have technical expertise; they investigate and analyze issues</li> <li>• Joint fact-finding can provide a shared factual and analysis basis for collaboration</li> </ul>
Joint planning	<ul style="list-style-type: none"> <li>• Representatives of the interested parties participate in a committee with the power to make a binding decision</li> <li>• Involves dialogue, shared responsibility, multiple perspectives, and in-depth deliberations</li> <li>• Tends to work best when serious environmental impacts and trade-offs, a wide range of complex issues, many concerned public and agency groups, sufficient time for planning, public strongly desires formal involvement program, and agency has capacity to support</li> <li>• Works best when mutual respect and trust, recognition of knowledge, experience and respect of each participant, recognition of individual and joint rights, and responsibilities and agreement on meeting procedures</li> </ul>
Partnering	<ul style="list-style-type: none"> <li>• A formal or informal means to improve and build the relationship between government and another party and/or to work with one or more parties to achieve a common goal</li> <li>• Used primarily during contract performance; goal is a more cooperative, team-based approach</li> <li>• Partners share some level of responsibility, planning, and decision making and ownership of process and product; resources, expertise, energy, and risks shared</li> <li>• Partnerships can be formal or informal</li> <li>• Built on dialogue, trust, and alignment of purpose and effort</li> <li>• Partnering includes key scientists, policy makers, proponents, and the public</li> <li>• Parties jointly define a clear vision, goals, and action items and then work together to achieve; process is working when sharing, clear expectations, trust and confidence, commitment, responsibility, courage, understanding, and respect, synergy (outcome more than sum of partners), and excellence</li> </ul>
Group problem solving and opportunity seeking	<ul style="list-style-type: none"> <li>• Problem solving: group identifies problem, analyzes problem, identifies and evaluates possible solutions, and develops a plan for implementing the problem solution agreed to by the group</li> <li>• Opportunity seeking: begins with search for positive possibilities rather than reaction to something going wrong</li> <li>• Seeks to adhere to certain virtues of group inquiry such as clarity, honesty, open-mindedness, and attention to detail</li> <li>• Various characterizations of group development process (e.g., forming, storming, norming, performing) and of group maintenance behavior (e.g., harmonizing, gate keeping, encouraging, compromising, standard setting and testing and relieving tension)</li> <li>• Numerous individual and small-group methods for redefining and analyzing problems, for generating ideas, for evaluating and selecting ideas, and for implementing ideas (e.g., brainstorming, nominal group process, forced relationships or free associational, related or unrelated stimuli, lateral thinking techniques, charrettes, simulation games)</li> </ul>
Coalition building/networking/working groups	<ul style="list-style-type: none"> <li>• Networking refers to linking stakeholders through formal or informal channels so as to bring about plan formulation and implementation</li> <li>• Networks exist over time, are invitational, are numerous, have a limited capacity, are only as good as their members, depend on exchanges and incentives, tend to focus on selected actions, are channels of action, are a source of power, and take place in a symbolic context</li> <li>• Network tasks: map the terrain, gain information and identify actors; identify the relevant leverage points; select the tentative coalitions of support; float the initial image to symbolize the possibility of action; adapt the technical argument to the requirements of support and opposition; organize the coalition to trigger the multiplier and maintain and feed the coalition moves toward implementation; can be extended to collaboration in institutional design</li> <li>• Potential network roles: information provider, watchdogs, and pressure groups</li> <li>• Potential formation of networks of national, local, and international NGOs; can enable more efficient use of resources and expert knowledge</li> </ul>
Active mediation	<ul style="list-style-type: none"> <li>• Challenge to move beyond role as process people; mediators are nonpartisans but concerned with representation of affected parties in the mediation process and the efficiency, stability, and well-informed character of potential mediation outcomes</li> <li>• Moves beyond search for acceptable agreements within a given space of interests; the space is altered and the participants are transformed and empowered</li> <li>• Searches for new possibilities and agreements; concern with the decision's goodness and the quality of agreements</li> <li>• Involves a broader conception of political life, the public interests, deliberation and debate, mutual recognition and discussion, learning, and civic discovery</li> </ul>
Procedural and environmental justice	<ul style="list-style-type: none"> <li>• Assumes that the procedures used to arrive at decisions are significant determinants of satisfaction separate from the effect of outcomes; procedures perceived as unfair might reduce satisfaction with what are otherwise judged as objectively fair decisions</li> <li>• Practice of fairness: talk to trust, to outside selves, to mutual respect, and to joint search for mutually acceptable reasons and measures</li> </ul>

**Table 9.8** (Continued)

Collaborative planning	<ul style="list-style-type: none"> <li>• Fairness rules: decision consistency, suppression of bias, accuracy, error correction, representativeness of groups of affected individuals, ethically compatible with fundamental moral and ethical values and correction of power imbalances</li> <li>• Also necessary to address environmental justice issues</li> <li>• A process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited visions of what is possible</li> <li>• Embraces sustained dialogue, stresses common ground, and promotes shared vision of the future</li> <li>• Involves shared power, open discussions, and shared values</li> <li>• Characterized by face-to-face dialogue, mutual learning and voluntary participation; critical listening, reflection-in-action, and constructive argument all interact</li> </ul>
Cooperative modeling	<ul style="list-style-type: none"> <li>• Fosters the inclusion of all members of political communities while acknowledging their cultural diversity</li> <li>• Group of people work together to develop a model to better understand a complex system and explore consequences of various 'what if' scenarios</li> <li>• Modeling can help identify subsystems in which impacts are significant and structure deliberations</li> <li>• Can help create a sense of community</li> <li>• A healthy level of conflict can be beneficial</li> <li>• Importance of ensuring interest representation and local knowledge</li> <li>• Necessary to explicitly decide level of participation individuals want, ground rules for interaction and communications methods</li> </ul>
Collaborative public participation process	<ul style="list-style-type: none"> <li>• Characteristics: shared vision and objectives and measurable outcomes; process is equally managed by stakeholders; involves up-front planning, conflict resolution and open communications among participants; balanced and inclusive stakeholder participation; strong leadership; capacity created for stakeholders to understand information; possible help from facilitators</li> <li>• Sound informational base, rests on sound democratic participation principles, honors a full spectrum of values, and holds everyone responsible for success</li> <li>• Begins with mutual education; no one leader; no one excluded from table; works together with community to define shared visions that sustain the community and the environment</li> <li>• Requires advance planning, management support, funding for a facilitator and other expenses, and sufficient time to reach useful results; crucial to maintain a balance of power among participants</li> </ul>
Collaborative governance	<ul style="list-style-type: none"> <li>• Starts from proposition that large and growing fraction of capacity to create public value exists outside government</li> <li>• Brings public and private stakeholders together in collective forums with public agencies to engage in consensus-oriented decision making</li> <li>• Process is formal, consensus-oriented, and deliberative</li> <li>• Process involves face-to-face dialogue, trust-building, commitment to the process, shared understanding, and intermediate outcomes</li> <li>• Effectiveness influenced by such variables as prior history of conflict or cooperation, incentives for stakeholders to participate, power and resource imbalances, leadership and institutional design</li> <li>• Potential role for IA in contributing to collaborative governance; can assume important roles in joint fact-finding, in realizing meaningful stakeholder involvement, in interactions between people and experts, and in identifying problems and alternative solutions</li> </ul>
Comanagement	<ul style="list-style-type: none"> <li>• Government and stakeholders work cooperatively to undertake integrated management of the environment and natural resources in a sustainable way consistent with goals of parties; primarily applicable to indigenous communities; allows parties with an interest in the ownership and management of natural resources to power share; various mechanisms (e.g., a cooperative, a comanagement council)</li> <li>• Makes it possible to integrate local community interests with third party and government interests</li> <li>• Principles: public ownership and government responsibility, cooperate as partners, stewardship of natural resources and environment, integration of environment/natural resources, economic development and social well-being and inclusive process</li> <li>• Lessons: government commitment, open debate about long-term direction, meaningful third-party agreement, a reflective and evolving process, real teeth and shared decision making, direct community input to resource inventory and planning, community and local government staff, formal agreements, a broad range of interests, coalitions of interests, multiresource framework, interim measures, comanagement plan and implementation, action linked to information and understandability</li> </ul>
Consensus building	<ul style="list-style-type: none"> <li>• A process in which people agree to work together to resolve common problems in a relatively informal, cooperative manner; two meanings of consensus: unanimity and positive support from large proportion of participants</li> </ul>

(continued)

Table 9.8 (Continued)

	<ul style="list-style-type: none"> <li>• A good consensus-building process: includes all relevant and significantly different interests, is driven by a purpose and tasks that are real, practical, and shared by the group, is self-organizing, allows participants to decide on ground rules, objectives, tasks, working groups, and discussion topics, engages participants, keeps participants at the table, interested and learning through in-depth discussion, drama, humor, and informal interaction, encourages challenges to the status quo and fosters creative thinking, incorporates high-quality information of many types and assures agreement on its meaning, seeks consensus only after discussions have fully explored the issues and interests and significant effort has been made to find creative responses to differences</li> <li>• Represents a way to search for feasible strategies to deal with uncertain, complex, and controversial planning and policy issues of common concern; properly designed can produce results that approximate the public interest</li> <li>• Creative efforts can be enhanced by techniques such as scenario formulation and role-playing simulation</li> </ul>
Shared visions planning	<ul style="list-style-type: none"> <li>• A way to use computers to help stakeholders to participate in rigorous planning analyses; developed by Institute for Water Resources, U.S. Army Corps of Engineers</li> <li>• Shared vision models are built using user-friendly graphical simulation models; built with decision maker and stakeholder involvement; models used to evaluate alternative plans according to decision criteria</li> <li>• Marries systems engineering, public policy, and public involvement; similar to adaptive environmental assessment and management</li> <li>• Because experts and stakeholders build models together, conducive to developing a consensus view of how system works as a whole and how it affects stakeholders and the environment</li> <li>• Model flexibility makes it easy to analyze sensitivity of conclusions to errors in data, changed forecasts, or conflicting assumptions</li> <li>• Other more general visioning approaches combine team building with an alternative futures planning process to produce shared visions; factors provide a basis for themes, which are, in turn, built into scenarios and strategies which are compared, which then form the basis for short- and medium-terms goals and action plans; process completed with assignments and target dates</li> </ul>
Constructive engagement	<ul style="list-style-type: none"> <li>• An approach that brings groups together to establish and monitor a facility's environmental activities through a cooperative, nonadversarial partnership</li> <li>• Takes many forms (e.g., citizen advisory groups, stakeholder negotiations, formal mediations, "Good Neighbor Agreement" processes, oversight committees, independent organizations)</li> <li>• Have dealt with issues such as site location, facility operations, emissions and waste controls, worker health and safety, regulatory relief, site cleanup, and pollution prevention</li> <li>• Offers an approach to improving communications among stakeholders and for finding creative solutions about facility activities</li> </ul>
Democratic deliberation	<ul style="list-style-type: none"> <li>• Build upon the concepts and ideas of Habermas</li> <li>• Applies Habermasian principles; a useful ideal type for investigating deliberation in IA</li> <li>• Sees IA as having "hidden" deliberative potential</li> <li>• Treats IA as an arena for democratic deliberation</li> <li>• Seeks to clarify whether IA public participation fulfills the deliberative idea notion of discourse</li> <li>• Applies inclusive and dialogue-based participatory tools</li> <li>• Seeks to offset resource distribution inequities</li> <li>• Considers role of institutional arrangements in facilitating or inhibiting discourse</li> <li>• Assesses if and in what ways views of participants change as a result of deliberation</li> </ul>
Community engagement and community-based IA	<ul style="list-style-type: none"> <li>• Seeks to engage the broader community in developing broader visions and higher level policies and in addressing key issues</li> <li>• Involves a partnership of the state, the community, and the proponent</li> <li>• The public is meaningfully engaging, both formally and informally</li> <li>• Use of dialogue-based methods (e.g., interactive workshops) for visioning, brainstorming, and critical reflection</li> <li>• Helps reduce power differentials among participants</li> <li>• Conducive to individual and social learning and can facilitate a transition to sustainability</li> </ul>

Sources: Ansell and Gash (2007), Bauer and Randolph (2000), Benveniste (1989), Blake (2010), Buuren and Nootboom (2010), Cockerill et al. (2010), Creighton et al. (1999), De Bono (1992), Donahue (2004), Forester (1999), Gauthier et al. (2011), Gray (1989), Healey (1997), Innes (1996), Innes and Booher (1999), Koivurova (2008), Krieger (1981), Lawrence et al. (1997), Laws (1996), Maynes (1989), Moore and Woodrow (1997), Mosley et al. (1999), Nagel (1987), Patton et al. (1989), Pope and Grace (2006), Praxis (1988), PCSD (1997), Ryu et al. (2004), SERM (undated), SIFC (1996), Sinclair et al. (2007), Sinclair et al. (2009), Susskind et al. (1999), Susskind and Madigan (1984), Susskind and Cruikshank (1987), Swor and Canter (2011), US EPA (2000a,b, 2001a,b), Westman (1985), Wikland (2005), Witty (1994).

(Kain and Söderberg, 2008). It should decentralize decision making (Gibson, 2006a). It should include interagency and stakeholder collaboration (Noble and Gunn, 2009). The participants should bring to the table a diversity of relevant knowledge and experience. It should be substantive—systematically addressing intergenerational equity and the limits of life support systems (Govender et al., 2006). A collaborative process should be jointly undertaken and owned by the participants. Links among participants should be facilitated and strengthened by such mechanisms and methods as joint planning, partnering, networking, coalition building, the use of working groups, mediation, cooperative modeling, comanagement, group problem-solving opportunity seeking, consensus building, shared vision planning, community engagement, and community-based IA. Power and responsibility should be shared. It should enhance the capacity of participants to both listen and hear the stories of others (Hodge, 2004). Technical specialists (e.g., fact-finders) should assume a support rather than a lead role. Collaboration also can be facilitated by technical support methods such as modeling, environmental systems analysis, and life-cycle analysis (Cockerill et al., 2010; Sinclair et al., 2007). A collaborative IA process should be directed toward and guided by substantive environmental management, environmental justice, and sustainability ends. The process should be positive and purposive. It should strive to develop a complex and collective vision of what the parties wish to sustain (Hanna, 2009b). Third parties (e.g., active mediators) should support the realization of stable, efficient, and “good” outcomes. It should extend beyond IA approvals to include citizen-centered monitoring (Hunsberger et al., 2005).

The participants should generate and then pursue visions, goals, objectives, and opportunities. They should rectify and ameliorate problems. They should identify priorities and establish limits (Hermans and Knipperberg, 2006). The process should be open, voluntary, informal, flexible, cooperative, and consensus seeking. It should be guided by procedural, democratic principles such as clarity, honesty, commitment, mutual recognition, mutual respect, trust, open-mindedness, confidence, fairness, and attention to detail. The process should be procedural just. Power imbalances should be offset. The process should be creative and synergistic. Participants should jointly discover and explore new ideas and solutions. They should make effective use of methods (e.g., models, scenarios, role-playing simulation, brainstorming, lateral thinking procedures, nominal group process) and group development and maintenance techniques, conducive to fostering and applying creativity. Collaborative processes can be enhanced by drawing upon insights and distinctions identified by such concepts as procedural and environmental justice, collaborative governance, and democratic deliberation.

Participants in an effective collaborative process are altered and empowered by the experience. The process should not be confined to the group. Ongoing contacts should be maintained with constituents. The process, to be more than an

interesting experience, must be practical and real. Outcomes should be formalized (e.g., a plan, a strategy, an agreement, a contract, a rule, an IA, facility operations) and capable of implementation. The collaborative process, to be effective, needs to be supported by management (e.g., resources, time) and by the public. Implementation may necessitate networking and coalition building and maintenance. Sometimes, institutional design and reform may be required.

## 9.5 INSTITUTING A COLLABORATIVE IA PROCESS

### 9.5.1 Management at the Regulatory Level

Table 9.9 highlights examples, from the four jurisdictions, of regulatory level measures for facilitating agency and public collaboration in the IA process.

The four jurisdictions generally include methods to ensure that information is provided to the public and that comments and concerns are obtained from the public. Some progress has been made to further the involvement of traditionally unrepresented and underrepresented segments of society. There are very limited provisions for continuous, in-depth public involvement. There remains room for improvement in ensuring early and frequent public involvement, in involving the public in IA screening, scoping, and postapproval decisions, and in demonstrating how public concerns and preferences have influenced decision making.

All four jurisdictions have addressed IA communications in terms of communicating with the public either directly or through documents. Considerable progress has been made in ensuring electronic access to IA documents and comments. General references are made to effective two-way communications. Some scattered references are made to adapting communications strategies and documents to meet the needs of communities and of various segments of society. More specific advice could be provided concerning communications principles, communications skills, offsetting communications distortions, and applying measures to foster and enhance dialogue among IA process participants.

The four countries have devoted considerable attention to educating IA practitioners and the public about IA, both in general and with specific reference to public participation principles and practices. There also are numerous, albeit scattered, efforts to integrate community and traditional knowledge into IA requirements and practices. Very little attention, except for general references, has been devoted to mutual learning concepts, methods, and practices. ADR, as an option for resolving IA disputes, does not appear to have received much attention in either Europe or Australia. The logical departure point for assessing the potential role of ADR in IA is to draw upon the extensive US and Canadian knowledge base. Additional attention could be devoted to the specific adjustments needed to both IA and ADR requirements and practices to more effectively link and integrate these two related environmental management fields.

**Table 9.9** Positive and Negative Collaborative Examples at the Regulatory Level

United States	Canada	Europe	Australia
(+) Numerous references to open decision making, public notification, early public involvement, timing requirements, and public involvement at key decision points; criteria for when public meetings or hearings appropriate	(+) Purposes of Act and EA Agency objects include promoting coordination and cooperation with aboriginal peoples, and promoting opportunities for meaningful public participation	(+) Proposed Project Directive: EIA includes consultation with public concerned and environmental authorities	(+) Includes provisions regarding notification procedures, document availability, the soliciting of public comments in response to draft IA documents, the description of public consultation procedures and of the views of affected communities, and procedures for conducting public inquiries (Australian Government, 2007a)
(+) Agencies and individuals consulted must be listed, and documents related to the public's participation must be included	(+) Comments from the public are identified among the factors to be considered; community and aboriginal traditional knowledge also may be taken into account	(+) PPD: highly collaborative approach to development of Directive (EC, 2012a,b,c,d)	(+) Refers to a cooperative approach involving governments, communities, landowners, and indigenous peoples
(+) Guidelines address document dissemination to other governments (states, Indian tribes, local agencies) and public; comments must be invited	(+) The definition of effects on aboriginal peoples is broader, encompassing health, heritage, cultural, and resource and land-use effects	(+) PPD: provision for reasonable time frames for different phases; time frame for consulting public not less than 30 days and not more than 60 days	(+) IA documents required to identify affected parties, to indicate how the communities may be affected, to describe the views of the public regarding the proposed action, and to take into account public comments
(+) Continuous contact with nonagency stakeholders recommended	(+) Process requires a federal coordinator	(+) PPD: scoping includes determining the public and authorities likely to be concerned	(+) IA documents required to identify affected parties, to indicate how the communities may be affected, to describe the views of the public regarding the proposed action, and to take into account public comments
(+) Opportunities for public involvement during scoping and during draft and final IA document review	(+) Provisions for public access to screening report and draft EA	(+) PPD: information to public—decision, conditions, basis for decision including public participation process, main mitigation measures, and monitoring measures	(+) Several provisions aimed at facilitating involvement of indigenous people and for promoting the use of indigenous peoples' knowledge
(+) Potential for judicial review of the final EIS; an EIS can be rejected if it fails to foster informed decision making and public participation	(+) Decision posted online; Internet notification procedures for panels; panel must consider public concerns	(+) PPD: opportunity to comment while options still open to competent authority	(-) No opportunities for public involvement in minister's decisions regarding IA type
(+) Extensive range of public involvement guidelines; some refer to the participation of indigenous groups and tribal citizens (US DOE, 2010)	(+) Reference is made to cooperation and coordination between federal and provincial governments, among federal departments and agencies, and with aboriginal peoples	(+) EIA and SEA directives include general references to notifying and informing the public, making screening reasons and documents available, providing early and effective public participation opportunities, enabling the public to express opinions on draft documents, the preparation of nontechnical summaries, allowing sufficient time for consultation and transparent decision making	(+) Accepted reforms include measures to make IA documents, submissions, and public comments readily available, to make the basis for significant decisions more transparent, and to incorporate minimum timelines
(+) Citizen's guide to NEPA (US CEQ, 2007b)	(+) Reasonable public notice and opportunity to comment on draft guidelines	(+) SEA directive requirement to make draft plan or program available to authorities and public	(+) Commitment to prepare principles and guidelines for best practice public consultation, and to perform auditing of public awareness and effective engagement (Australian Government, 2011d)
(+) Stakeholder directories (US DOE, 2002a)	(+) Canada provides considerable IA guidance, some oriented to IA practitioners and some geared to more general audiences; IA training oriented to overall requirements and to specific types of IA documents is provided	(+) The SEA directive refers to the public availability of monitoring results and showing how consultations influenced the final plan or program; includes consultations with environmental and health authorities	(+) References to clear and understandable documents and to effective two-way communications with the public
(+) U.S. environmental justice requirements conducive to broadening the range of publics	(+) Public opportunity to comment on initial steps in determining if EA required, during conduct of EA, on draft EA, and during panels	(+) Public notification and involvement guidance (DETR, 2000; EC, 2009e; European Union, 2003)	(+) References to special arrangements for affected groups with particular
(+) Presidential proclamation has sought to further promote public transparency and involvement in implementing NEPA (U.S. Administration of Barack H. Obama, 2009)	(+) Participant funding provisions (CEAA, 2008b, 2009b)	(+) Links to Aarhus Convention (public access to information,	
(+) Updated NEPA web page	(+) Public participation guidance (CEAA, 2010b)		
(+) Efforts to facilitate enhanced communications are evident from the preparation of stakeholder directories, from the soliciting of advice from stakeholder groups and	(+) Detailed provisions: CEA Registry (government-wide online registry); web site, project files		



**Table 9.9** (Continued)

United States	Canada	Europe	Australia
<p>advisory committees, and from the provision of status reports to local parties</p> <p>(±) Two-way communications, dialogue, and improved communications are recurrent themes in IA guidance documents; some still argue that communications are often one way</p> <p>(+) Numerous basic and advanced NEPA courses</p> <p>(+) Community outreach is a major focus of environmental justice requirements and guidelines</p> <p>(+) Highly controversial, a significance factor; conflicts with the plans, policies, and controls of other governments must be identified</p> <p>(+) ADR has been used extensively in U.S. IA practice</p> <p>(+) Handbook on collaboration in NEPA (US CEQ, 2007a)</p> <p>(+) Tribal capacity building guidance (US CEQ, 2004)</p> <p>(+) NEPA regulations refer to compliance capability; guidance on enhanced tribal capacity</p>	<p>(+) There has been considerable experience in Canada in the negotiations of impact management and benefits agreements and land claims agreements, in the establishment of aboriginal IA regimes, and in resource comanagement (O'Faircheallaigh, 2006)</p> <p>(+) The tri-party IA approach (federal, territorial, indigenous people) adopted in the north is a form of joint planning (Armitage, 2005)</p> <p>(-) Mediation option remove</p> <p>(-) Public involvement provisions under the new Act have been criticized as belated (i.e., after registration document filed by proponent), and inhibited by tight time restrictions, a partial definition of the environment, a narrow range of projects subject to the Act, discretionary project definitions, an ambiguous public role during scoping, a restricted range of types of alternatives, a narrow definition of interested parties for National Energy Board hearings, uncertainties regarding IA substitution criteria, and the possibility of projects being approved notwithstanding significant adverse effects, if justifiable</p> <p>(-) Federal IA requirements also have been characterized as being limited to notification and consultation (rather than collaboration and shared decision making), and as being weak regarding public involvement at the strategic level (Noble, 2009b; Sinclair and Diduck, 2009)</p> <p>(-) Canadian IA systems have been criticized for emphasizing process over outcomes and for favoring bureaucratic elites and experts over the general public and local forms of knowledge (Galbraith et al., 2007)</p>	<p>public participation, access to environmental justice)</p> <p>(+) Requirement to prepare a nontechnical summary</p> <p>(+) Devotes particular attention to transboundary IA communications procedures</p> <p>(+) European EIA and SEA guidelines describe the potential roles of public participation in screening, scoping, and IA document review</p> <p>(+) Europe launched a major initiative to facilitate SEA capacity building in Eastern Europe (UNECE, 2007); networking among government officials has proven to be an especially effective IA capacity-building strategy (UNDP and REC, 2006)</p> <p>(±) IA requirements and guidelines in Europe largely pertain to collaboration among European states; public participation provisions, at both the EIA and SEA levels, have tended to be weak (Benson, 2003); strengthened somewhat in Proposed EIA Project Directive</p>	<p>communications needs having adequate opportunity to comment on proposed actions</p> <p>(+) Reference to taking into account the proponent's environmental history</p> <p>(+) Requirement that community and stakeholder comments must be taken into account</p> <p>(+) Draws upon a broader knowledge base with the use of a series of independent advisory committees (e.g., Threatened Species Scientific Committee, Biological Diversity Advisory Committee, Indigenous Advisory Committee)</p> <p>(+) Prepared an IA training resource manual for use in developing countries</p> <p>(+) Commitment to strengthen the involvement of indigenous peoples (Australian Government, 2011d)</p> <p>(+) Emphasis on a cooperative approach among governments, communities, landowners, and indigenous peoples; addresses cooperative arrangements between the Commonwealth and states and territories in considerable detail</p> <p>(+) Accepted reforms allow for more time for public comments and the greater use of SEA</p>

Collaboration appears to be well developed in the IA requirements of the four jurisdictions regarding interactions among governments. Some attention has been devoted to mechanisms for facilitating stakeholder involvement and collaboration (e.g., participant funding, environmental justice). Considerable experience has been acquired in applying collaborative approaches in such related fields as resource, environmental, and facility planning and management, especially in the United States. Some attention has been devoted to general collaborative planning approaches. There are scattered examples of good practice collaborative IA approaches in all four jurisdictions. But these examples are more the exception than the rule. Practical collaborative planning methods and frameworks and the adaptations to IA requirements needed to facilitate collaborative IA practice could receive more attention. Experiences with collaborative IA approaches, and the role of the regulatory level, should be evaluated from multiple perspectives. Comparisons among jurisdictions would be worthwhile, appreciating the need for contextual adjustments.

All four jurisdictions engage in IA capacity building, to varying degrees. Although the four jurisdictions offer some worthwhile examples of IA capacity-building initiatives, there remains ample room for a more systematic, comprehensive, and inclusive approach. The effectiveness of capacity-building efforts should be evaluated from multiple perspectives. Initiatives to substitute IA requirements with those of lower decision-making levels should be preceded by independent evaluations of IA capacity and, where needed, capacity-building measures. Contextual differences and differences in stakeholder interests and preferences should be taken into account. IA capacity building is addressed in greater detail in Section 9.6.

### 9.5.2 Management at the Applied Level

Figure 9.6 illustrates an example of collaborative IA process. The figure and the description that follows depict a process consistent with IA public participation goals, principles, and practices. Specific consultation, communications, mutual education, negotiations, and collaboration concepts, methods, and processes are incorporated into the process. The process seeks to enhance collaborative planning and decision making by IA stakeholders. Communications, mutual education, negotiations, and collaborative elements are grafted onto and integrated into the IA process. The process is broadened to encompass numerous publics. It is supported by a sound knowledge base. The process is informal, open, inclusive, interactive, and people-centered.

**Start-Up and Planning** The collaborative IA process begins with initial consultation. Issues are identified. Level of interest is determined. An overview of environmental characteristics is undertaken. Historical grievances are noted. Remedial actions are taken where practical. Key people and organizations are identified. Pertinent organizational

mandates, characteristics, and constraints are described. This initial context scanning provides the basis for a conflict assessment. The conflict assessment considers issues, potential parties, and potential conflicts. It then decides whether alternative dispute resolution is possible and appropriate. Key parties, who might be interested in or potentially affected by the proposed action, are identified. The parties are contacted. Appropriate representatives are identified and recruited as members of an advisory committee. The committee includes a diversity of proponent, government, and public stakeholder representatives. The committee does not have final decision-making authority. However, because of the membership breadth and the in-depth deliberations anticipated, the findings and recommendations that emerge from the committee are expected to have considerable decision-making “weight.”

The committee establishes and agrees to procedural rules and principles. It identifies an appropriate range of subcommittees. IA and public participation planning are integrated. The overall IA/public participation plan addresses such matters as general principles and goals, issues, and problems to address, activities, and tasks, schedule, resource requirements, technical specialist input requirements, budgets, roles and responsibilities, and public involvement procedures. The plan also includes communications (e.g., information exchange procedures, communications goals, principles and methods, measures to overcome communications barriers, plans for groups and organizations with special communications needs), mutual education (e.g., community, proponent and regulator training and education requirements, mutual education goals, principles and methods, plans for groups and organizations with special educational needs), negotiations (e.g., third-party assistance, measures to offset power imbalances, negotiations goals, principles and methods, conflict identification, and management procedures), and collaboration (e.g., core values and preliminary visions, collaboration goals, principles and methods, outreach and capacity-building methods, participant assistance requirements, procedures to foster creative collaboration) elements. A draft plan is first prepared. The draft plan is modified based on comments from committee members and from a broader audience. Further refinements and adjustments to the plan occur as the IA process unfolds. An evaluation of the effectiveness of the start-up and planning activities is undertaken.

**Application** The core application activities largely mirror those commonly associated with IA processes. The overall process is scoped. The need for action is assessed. Alternatives, of varying types and at different levels of detail, are systematically generated, screened, and compared. Baseline and proposal characteristics are determined. Individual and cumulative impacts, risks, and uncertainties are identified and predicted. Impact significance, with and without mitigation, is interpreted. Compensation, monitoring, and contingency measures are determined. An overall impact

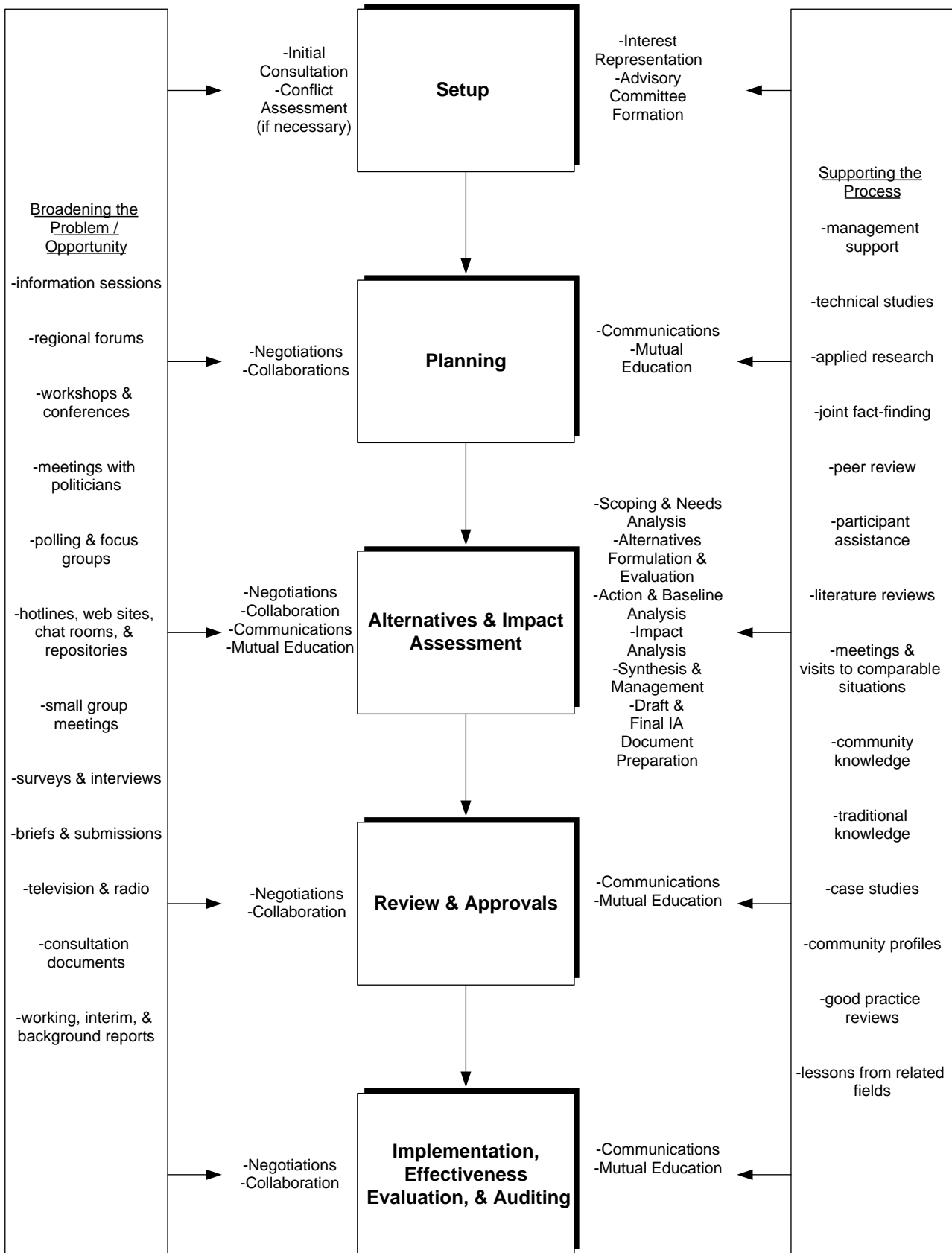


Figure 9.6 Example of a collaborative IA process. Adapted from Lawrence (2005b).

management strategy is formulated. Techniques such as sensitivity analyses test the robustness of conclusions. Draft and final IA documents are prepared. The modifications to the draft IA documents reflect both regulatory and public concerns and preferences. The process is highly iterative. Unlike most conventional IA processes, it is the advisory committee that takes the lead, and it is the IA and other specialist practitioners who assume a support role.

The committee, with the assistance of specialists, guides both the technical and the procedural (i.e., public involvement, communications, mutual education, negotiations, collaboration) activities. Public involvement includes numerous procedures to provide information out to the public, to obtain information, comments, and concerns from the public and to exchange information and perspectives with the public. Communications involves interactions both within the committee and between the committee and constituents. It includes activities such as preparing clear, succinct, accurate, and readily understandable documents, identifying and offsetting misinformation, distortions, and communications barriers, facilitating and maintaining dialogue, ensuring that appropriate adjustments are made to reflect the varying communications requirements of different groups and segments of society (e.g., based on language and cultural differences), establishing and keeping communications channels open, ensuring that IA documents are known about and are readily available, and ensuring that local perspectives and concerns are accurately reported and effectively integrated into IA documents.

Mutual education extends well beyond community education. Public knowledge of proposed actions, options, environmental conditions, potential impacts, and management measures is enhanced. Training and education opportunities are provided to public committee members and, where appropriate, to other members of the public. Mutual education also entails educating the proponent, the regulators, and the specialists, ensuring that the process fully accommodates community and traditional knowledge, facilitating learning about facts, values, issues, decision-making processes and participants, integrating learning from practice stories, ensuring that learning is free from distortion or coercion, and promoting mutual, social, transformative, and critical learning.

Negotiations are tailored to the conflicts that emerge and to the characteristics of individual IA activities. Concerns, priorities, issues, and points of conflict are identified. Conflicts are, where practical, avoided, “staved off,” and ameliorated. Remaining conflicts are, wherever possible, resolved. Third parties (e.g., facilitators, mediators) assist the negotiations. Possible conflict resolution packages are identified, screened, and compared. Commitments are obtained. Where warranted, the selected packages are incorporated into agreements, suitable for signing by stakeholder representatives. Provisions are included to ensure the monitoring of agreement implementation and to permit mutually acceptable adjustments to suit changing circumstances. Collaboration builds rapport, trust, consensus, and support. Common goals and shared

visions of the future are formulated. Procedural inequities are offset. The creative and collaborative exploration of problems and opportunity is fostered. Effective use is made of synergistic methods for generating novel approaches to complex issues and concerns. The process is focused on achieving environmental and sustainability improvements without sacrificing outcome equity, especially for disadvantaged groups and segments of society.

The customary IA activities are all undertaken in accordance with regulatory requirements and good practice, but in a manner that integrates all elements of effective collaboration. The effectiveness of the IA and public participation process and outcomes are evaluated both during and subsequent to the completion of the application activities. The evaluation leads to both procedural and substantive adjustments and refinements.

***Review, Approvals, and Postapprovals*** A sound decision-making basis is provided for all parties that should have a say in whether and how the proposed action proceeds. Communications and mutual education ensure that all parties are fully appraised, in a form suited to their needs, of all matters relevant to their deliberations. Care is taken to avoid and offset communications breakdowns and knowledge deficiencies. Negotiations and collaboration enable the parties to avoid, reduce, and resolve disputes and to generate creative approaches and solutions that serve both the interests of the parties and the broader public interest. Effective negotiations and collaboration eliminate the need for or dramatically scope formal public review proceedings (e.g., hearing, litigation before the courts).

Collaboration activities extend into the postapprovals stage. Communications and mutual education ensure that all parties are fully informed of implementation activities. Proponents and regulators are made aware of community concerns and preferences as they emerge. Communications among the parties is facilitated. Prompt action is taken to correct misinformation and communications distortions. Knowledge deficiencies are corrected. Conflicts are avoided where practical. Negotiations serve to ameliorate and resolve residual conflicts. Collaboration ensures that impact management measures are efficient, focused, and effective. Local benefits, rapport, trust, and cooperation are maintained and enhanced. The effectiveness of all elements of the IA/public participation process is evaluated immediately following approvals. Additional effectiveness evaluations are undertaken periodically through implementation and whenever major unforeseen circumstances and remedial actions occur.

***Broadening and Supporting the Process*** Confining participation to an advisory committee composed of stakeholder “representatives” places an impossible burden on committee members. Committee members can only be assured that they are representing the views, interests, and concerns of their constituents if there are ample

opportunities for the broader public to be involved in the process. The process provides for such opportunities prior to each major decision. A variety of involvement procedures inform and obtain input from the public. The public is provided with an ample range of different types of involvement opportunities (e.g., information sessions, small group meetings, television, radio, web sites). Involvement procedures are tailored to meet the needs of various groups, organizations, and segments of society. A particular effort is made to involve those groups and segments of the community likely to be the most directly affected and which are especially vulnerable to change. Positions adopted by the committee or by subcommittees are tested with such techniques as surveys, polling, and interviews. Committee members carefully compare their perspectives and positions against those contained in briefs and submissions. The broader public is provided with an opportunity to respond to background, interim, and draft reports. Expanding the base of public understanding and involvement contributes to an enhanced level of comfort for both committee members (that they are effectively representing the views of their constituents) and the public (that their concerns, interests, and preferences are being adequately represented).

A collaborative IA process is highly dependent on an adequate level of support. There must be a strong management commitment to the approach—a commitment reflected in adequate resources and sufficient time for the process to “proceed at its own pace.” The activities of the committee are supported by sound technical studies, applied research to address areas of uncertainty, community knowledge, and where applicable, traditional knowledge. Community involvement in establishing a sound knowledge base is supported, where needed, by participant funding and by procedural and substantive training. Specialists assist joint fact-finding. Committee members draw upon the insights and lessons obtained through visits to comparable situations, community profiles, case studies, literature reviews, reviews of experiences in related fields, and good practice reviews. Peer reviewers test technical analyses. Good communications practice is reflected in how documents are structured, presented, and edited. The support activities reflect the needs, preferences, priorities, and expectations of the committee members, of regulators, and of the broader public.

### 9.5.3 Collaboration IA Process Characteristics by IA Type

**Crosscutting Characteristics** As highlighted in Table 9.10, each IA type provides for participant collaboration, albeit to varying degrees and in different forms. All IA types presuppose a multistakeholder system. They all provide for discourse, networking, mutual learning, and collaboration among participants. Each emphasizes the need for transparent, open, and inclusive decision making. They all stress the need to integrate the concerns and suggestions of interested and affected publics early in the IA, prior to key decision

points throughout the process and as part of follow-up. They all encourage capacity building to facilitate a more open, fair, and effective planning and decision-making process. The differences among the collaborative versions of the various IA types pertain more to orientation and emphasis.

**Collaborative SA Practice** With democratic SA practice the collaboration of interested and affected parties is strongly encouraged but always with a purpose—sustainability. Process and substance are fully integrated. Collaborative multistakeholder planning systems are guided and bounded by sustainability ends and limits.

**Collaborative SEA Practice** Collaborative SEA practice emphasizes the importance of dialogue, mutual learning, feedback, and participation. However, because SEA is so closely connected to planning, policy making, and decision making, and so interdependent with its organizational context, great stress is placed on understanding and reforming institutions (e.g., institutional learning, ameliorating bureaucratic inertia and resistance), on the political dimension of decision making (i.e., enhancing IA decision-making influence), on dialogue within and among public agencies, and on opening up an often closed planning and decision-making process to greater levels of public involvement and participation.

**Collaborative EIA Practice** Historically, project-level EIA has tended to involve a top-down, technically-driven, and often adversarial EIA process. Public participation, in such cases, tends to be limited to public education and tightly circumscribed forms of public involvement. With collaborative EIA practice, interested and affected parties (especially local community and potentially affected groups and individuals) operate in a partnership with regulators, proponents, and other stakeholders to derive and implement mutually beneficial solutions. Such procedures are open, transparent, inclusive, and interactive. They are characterized by communicative learning, dialogue, and negotiations. Resource inequities are ameliorated through such measures as participant funding. Secondary benefits of collaborative EIA processes include individual and collective learning, community empowerment, community capacity building, and the advancement of community objectives.

**Collaborative EcIA Practice** Collaborative EcIA practice tends to operate at two levels. At one level, it is concerned that the knowledge and insights of ecological and biodiversity specialists are fully integrated into the IA process and, in turn, into planning and decision-making procedures. Collaboration at this level involves narrowing the gap between the scientific community and proponents and government officials, and strengthening alliances among environmental specialists. At another level, collaborative EcIA practice entails integrating community and public knowledge and perspectives into each process step. In common

**Table 9.10** Collaborative IA Process Characteristics by IA Type

Collaborative SA Practice	Collaborative SEA Practice	Collaborative EIA Practice
<p>Guided by sustainability decision-making protocols</p> <p>Stresses communications of sustainability issues</p> <p>Seeks transformative outcomes; social learning an essential element</p> <p>Redefines sustainability assessment as collaborative sustainability assessment</p> <p>Founded on principles of civility, democratic governance, and decision-making decentralization</p> <p>Draws upon a multistakeholder planning system; involves partnership of proponents, state, and communities</p> <p>Different perspectives and definitions gradually combined, through a sustainability discourse, to form complex and collective vision of what wish to sustain</p> <p>Framed discourse refines sustainability perspectives, debates trade-offs, identifies priorities, and establishes limits</p> <p>Encompasses environmental, organizational, and societal perspectives</p> <p>Facilitated by sustainability advisors</p> <p>Seeks stories of various interests as a means of engagement; links perceptions, history, and values; formally and informally meaningfully engages broader community in developing broader visions and addressing key issues</p> <p>Balances the needs of present and future generations</p> <p>Utilizes iterative approach; continual reflection back to original vision</p> <p>Favors integrated participatory and transdisciplinary methods, methodological pluralism, and stakeholder involvement as basis for more informed decision making</p> <p>Integrates SA training at local level</p> <p>Utilizes citizen-centered monitoring in the interests of sustainability livelihoods</p> <p>Emphasizes capacity building (e.g., encouraging learning, knowledge brokerage)</p>	<p>Entails strong institutional and vertical coordination and interagency collaboration</p> <p>SEA viewed as a form of communicative action, a mechanism for promoting public participation and social dialogue, and a means of enhancing communications among stakeholders and democratizing decisions</p> <p>SEA roles: knowledge brokerage, facilitator of strategic decision making, and catalyst for organizational learning</p> <p>Involves early discussion of SEA objectives</p> <p>Employs a participatory prestudy process to aid in data collection and objective formulation</p> <p>Improves planning/decision-making transparency, provides space for dialogue and for individual/organizational learning</p> <p>Utilizes participatory-dialogue-based methods (e.g., workshops, mediation, mediated modeling, consensus conferences, citizen juries, cooperative discourse)</p> <p>Emphasizes transparency, feedback, learning, and the promotion of public participation</p> <p>Seeks to foster learning and institutional reform and to facilitate consensus building, joint analysis, capacity building, and social mobilization</p> <p>Supported by stakeholder analysis, institutional analysis, IA, beneficiary analysis, and participatory poverty assessment</p> <p>Bridges a political dialogical approach and systemic disciplined inquiry</p> <p>Integrates multiple problem visions, establish communications links, guides communications strategies, and stimulates constructive collaboration and the production of common meanings</p> <p>Promotes stakeholder discourse reflection and provides for continuing dialogue, training, and education</p> <p>Seeks to broaden the SEA mindset (e.g., to systematically address cumulative effects)</p>	<p>A community-based approach to EIA, with a heavy emphasis on capacity building, dialogue, and empowerment</p> <p>Authority accepts value of participation</p> <p>Seeks an open and fair process</p> <p>Engages stakeholders and affected citizens in early dialogue</p> <p>Identifies the values and interests of interested and affected publics</p> <p>Promotes transparency, participation, discursiveness, and the active and critical</p> <p>Incorporates public input prior to each decision in IA process; all participation activities integrated into EIA</p> <p>Involves exchange of ideas among proponents, regulators, and public</p> <p>Seeks to combine different world visions while remaining flexible and inclusive</p> <p>Views the IA process as an arena for democratic deliberation</p> <p>Links design of public participation and EIA processes with nonformal education, individual and collective learning, social action, and sustainability</p> <p>Brings to bear a wealth of knowledge and diverse perspectives; links education, participation, and learning outcomes</p> <p>Emphasizes communicative learning</p> <p>EIA involves cooperation and even a partnership among regulators, proponents, and other stakeholders; builds on dialogue, trust, and alignment of purpose and effort</p> <p>Provides a grievance mechanism for people affected by project</p> <p>Ensures sufficient capacity to support process</p> <p>Local people participate in workforce and supply chain (i.e., local content requirements)</p> <p>Seeks substantive positive outcomes (e.g., participant learning, resource provision, participant influence, sustainability)</p>
Collaborative EcIA Practice	Collaborative SIA Practice	Collaborative HIA Practice
<p>A learning by doing and people-centered approach to integrating biodiversity considerations into broader livelihoods sustainability context</p> <p>Places within the context of international biodiversity treaties and conventions</p> <p>Integrates stakeholder biodiversity use, needs, and objectives</p> <p>Roles of different parties clarified, especially during scoping</p> <p>Treats resource management as a matter involving societal choice, involving all sectors and disciplines</p>	<p>Founded on principle that people have a right to be involved in decision making about planned interventions that will affect their lives</p> <p>SIA creates participatory process and deliberative spaces to facilitate community discussions regarding desired futures, impact acceptability, proposed benefits, and IA process inputs</p> <p>Identifies and describes interested and affected stakeholders and communities (profiles); assumes that individuals respond and adapt to change in different ways</p>	<p>Broadly defines health (community, social, mental, spiritual)</p> <p>Determines attitudes of affected communities toward issues of disease, risk, and health</p> <p>Founded on the right of people to participate in formulation and decisions that may affect their lives (including their health)</p> <p>Integrates local knowledge into health determinants</p> <p>Seeks an enhanced understanding of people's complex responses to change and potential health implications</p>

**Table 9.10** (Continued)

Collaborative EcIA Practice	Collaborative SIA Practice	Collaborative HIA Practice
Seeks to enable decision-making process to be gradually permeated by an ecological rationale	Provides meaningful participation and reassurance; SIA role in facilitating and coordinating stakeholder participation	Comprehensively addresses the multiplicity of stakeholders and types of knowledge, data and interests
SA frameworks guide stakeholders on biodiversity interventions	Entails proactive public involvement (e.g., community outreach); occurs continuously through the planning and decision process (e.g., interactive community forums)	Community involvement as full and active stakeholders a value underlying HIA; public should be engaged, informed, and influence decision making
Emphasis on sensitization and biodiversity capacity building	Builds on local knowledge and uses participatory processes to analyze concerns of interested and affected parties	Ensures meaningful and inclusive public participation; treated as a tool to engage and build relationships
Seeks to extend expert-based and technical biodiversity IA to citizens	Community participation fully integrated into SIA process	Recognizes value of and integrates local knowledge
Stakeholders select indicators of ecological health, including biodiversity	Founded on principle of free, prior, and informed consent; public acceptance a priority	Sometimes representatives from key stakeholder organizations and from affected communities overview the HIA process and outcomes (community partnerships)
Ensures equitable sharing	Includes interested and affected parties in identifying issues and goals, in deciding environmental and social value and impacts, in evaluating their importance, in analyzing alternatives, in making consensus-based choices, and in monitoring the planned intervention	HIA process is community led; proactively involves individuals and group and organizational representatives who have an interest or are affected by the proposal
Seeks to strengthen biodiversity partnerships and information networks	Community values and perceptions (e.g., risks) considered	Involves and engages health professionals; close communications between health professionals and decision makers
Biodiversity specialists engaged with planners and decision makers	Recognizes and builds on local and indigenous knowledge; recognizes indigenous rights (e.g., consensus model to address traditional environmental knowledge process)	Intensive stakeholder involvement throughout HIA process, especially during scoping; active stakeholder involvement in identifying health issues and determinants; emphasis on collaboration
Collaboratively involves ecologists and other specialists	Emphasizes vulnerability of underrepresented and disadvantaged populations; seeks to enhance marginal groups and facilitate greater equity; respects human rights	Focuses on accentuating positive health outcomes, avoiding adverse health impacts; distinguishes between voluntary/involuntary risks, incorporates equity issues (health equity IA), and emphasizes vulnerable subpopulations and distribution of health impacts among groups
Provides for communications and negotiations with stakeholders	Uses the knowledge and experiences of individuals most affected by proposed changes for projecting impacts	Inclusive communications of principal findings; distributed to stakeholders with meaningful review; publicly accessible
Assesses negative impacts on priority ecosystem services in terms of changes in beneficiaries' well-being	Fosters community engagement, social inclusion, building of social capital, capacity building, gender equity, community empowerment, and good governance	Public engaged in monitoring, implementation, and effectiveness evaluation
Should lead to understanding and support by nonspecialists	Involves an open and transparent IA process	
Management actions at appropriate scale and decentralized to lowest level	Engenders social learning by proponent, planners, regulators, and the public; role for SIA in managing conflicts	
Strengthens cooperation between planning and environmental authorities and stakeholders		
Monitoring undertaken jointly by government, research institutes, and capacity-building organizations		
Requires capacity building and the fostering of alliances		

*Sources:* Adelle and Weiland (2012), Ardern (2004), Ayr and Calloway (2005), Azcarate and Balfors (2009), Baker and McClelland (2003), Becker et al. (2003, 2004), Bhatia (2007), Bhatia et al. (2010), Bina et al. (2011), Binder et al. (2010), Blake (2010), Bond (2004), Bond and Morrison-Saunders (2011), Bond et al. (2004), Bonifazi et al. (2011), Booth and Skelton (2011b), Buchan (2003), Burdge (2003b, 2004), Craik (2008), Devuyt (2000), Diduck and Mitchell (2003), Donnelly et al. (2007), Égré and Senécal (2003), Elling (2011), Elliott et al. (2004), Esteves et al. (2012), Faber et al. (2010), Gasparatos et al. (2007), Gibson (2006a), Govender et al. (2006), Gunn and Noble (2011), Gunning et al. (2011), Hanna (2009a,b), Hansen and Kjørnø (2010), Harris-Roxas and Harris (2011), Harris et al. (2003), Hermans and Knippenberg (2006), Hodge (2004), Hunsberger et al. (2005), IAIA (2003, 2005, 2006a, undated b), ICPGSA (2003), IEEM (2006), Jiliberto (2011), Kemm (2005), Kende-Robb and Van Wicklin (2008), Khera and Kumar (2010), Kjørnø and Dalkmann (2011), Landry et al. (2009), Lane et al. (2003), Landsberg et al. (2011), Law et al. (2005), Lawrence (2009), LaPierre (2012), Lavallée and André (2005), Letsela et al. (2010), Lobos and Partidário (2010), Lockie et al. (2008), McCarthy and Utley (2004), Mindel et al. (2004), Morgan (2012), Negev (2012), Noble and Gunn (2009), Partidário and Coutinho (2011), Peltonen and Sairinen (2010), Peterson (2004), Pope and Grace (2006), Quigley and Taylor (2003), Raphael (2012), Rauschmayer and Risse (2005), Ross and Thompson (2002), Runhaar (2009), Scanlon and Davis (2011), Sheate and Partidário (2010), Shepherd (2008), Sherrington (2005), Simpson et al. (2005), Sinclair and Diduck (2009), Sinclair et al. (2009), Sinclair et al. (2008), Smith and Schin (2004), Söderman and Saarela (2010), Tamburrini et al. (2011), Tetlow and Hanusch (2012), Thérivel et al. (2010), Treweek et al. (2011), Tugwell and Johnson (2011), Tuinstra, Jäger and Weaver (2008), Vanclay (2003, 2006), Vicente and Partidário (2006), Walker (2003), Wernham (2007), Whitelaw et al. (2009), Włodarczyk and Tennyson (2003), Youngkin et al. (2003).

with collaborative SA, substantive ends and limits guide and bound the process. While emphasizing the value of public knowledge and the desirability of public participation, collaborative EcIA practice tends to stop short of advocating shared or delegated decision making.

**Collaborative SIA Practice** SIA has arguably gone the furthest in fully articulating the characteristics of highly collaborative IA practice. Collaborative SIA practice is founded on clearly defined procedural principles (e.g., the right of people to be involved in decisions that will affect their lives, free, prior, and informed consent, respect for human and aboriginal rights). Local and traditional knowledge is recognized and built on. It is also viewed as equally or more important than the substantive and procedural knowledge of social scientists, and of SIA and public participation specialists. Collaborative SIA practice is not limited to insisting on open and transparent decision making and public involvement prior to each IA decision. It also seeks to foster mutual learning, achieve consensus-based choices, apply fair and inclusive procedures, and ensure equitable outcomes. Particular emphasis is placed on the concerns and interests of underrepresented and disadvantaged groups and populations. Public participation is proactive (e.g., community outreach) and continuous. It seeks to rectify power imbalances (e.g., by applying capacity-building measures). IA-related public participation is expected to be conducive to such social ends as community engagement, social inclusion, social capital building, gender equity, community empowerment, and good governance.

**Collaborative HIA Practice** Collaborative HIA practice defines health broadly, with a particular emphasis on public perspectives, rights, values, attitudes, knowledge, and interests. In common with other substantive IA types, collaborative HIA practice entails effectively engaging specialists (e.g., health professionals), integrating local knowledge (e.g., into health determinants), and building health-related partnerships with communities. Collaborative HIA practice is community led—focusing on community health concerns and seeking to achieve positive health outcomes for the community in general, and for vulnerable subpopulations in particular. Collaborative HIA practice is transparent and inclusive. The public is fully and actively engaged in identifying health issues and determinants, in comparing options and selected preferred actions, in reviewing findings, and in monitoring, implementation, and effectiveness evaluation.

## 9.6 CONTEMPORARY CHALLENGE—IA CAPACITY BUILDING

### 9.6.1 Definition and Distinctions

Capacity building is a term increasingly evident in IA literature and good practice guidance. In general terms, it entails a

knowledge-intensive process that creates, utilizes, improves, transfers, and sustains a range of experiences, abilities, relationships, and values for addressing specific challenges or opportunities (UNEP, 2006; Virji et al., 2012). Capacity building tends to focus on understanding and on progressively and gradually eliminating obstacles to development objectives (e.g., sustainability). In so doing, conditions are created for efficiently and effectively undertaking specific tasks or responsibilities (Partidário and Wilson, 2011).

Capacity building can operate at various levels (e.g., individual, organizational, institutional, country) and scales (e.g., national, regional, local) (Virji et al., 2012). Capacity-building components (e.g., values, structures, skills, knowledge, procedures, resources, incentives, technology, training, regulatory reform, and networking) vary depending on the objectives (Dixon and Thérivel, 2011; Tamas, 2008). This suggests that capacity building entails a process (e.g., stages and activities) that integrates individual elements and activities into a coherent strategy, directed toward tangible ends. Capacity-building procedures are, or at least should be, founded on and bounded by ethical principles and limits (e.g., democracy, participation, development, continuous improvement, shared learning opportunities, equal access to opportunities) (Partidário and Wilson, 2011).

Capacity building can be applied to the field of IA as a whole and/or more specifically to various IA types, activities, settings, population subgroups, proposal types, impact types, environmental components, issues, time horizons, and organizational types and levels. As highlighted in Figure 9.7, IA capacity building necessarily entails collaboratively designing and managing the capacity-building process (definitions and distinctions), determining the area of application (applied to what, where, and how), selecting the constituency and capacity-building facilitators (for whom and by whom), deciding on the capacity-building objectives (for what purpose), and identifying, adapting, and integrating the capacity-building tools (by what means). Capacity building, in common with other IA aspects, builds on good practices at both the regulatory and applied levels (see Table 9.11).

### 9.6.2 Applied to What, Where, and When

IA has far from realized its full potential. There remains a considerable gulf between theory and practice. The quality and effectiveness of IA practice varies greatly from proposed action to proposed action, among jurisdictions, among IA types, among IA activities, and in relation to specific environmental components, issues, organizational types, and population groups. Improvements over time have been far from uniform. Arguably, in some instances, the quality of IA practice, as a result of both internal and external factors, has either declined or remained static. Also, good practice IA standards are highly context-dependent. The role of IA capacity building is to narrow the gulf between the aspirations of IA and its tangible achievements, appreciating that perceptions of the desired roles for and objectives of IA will



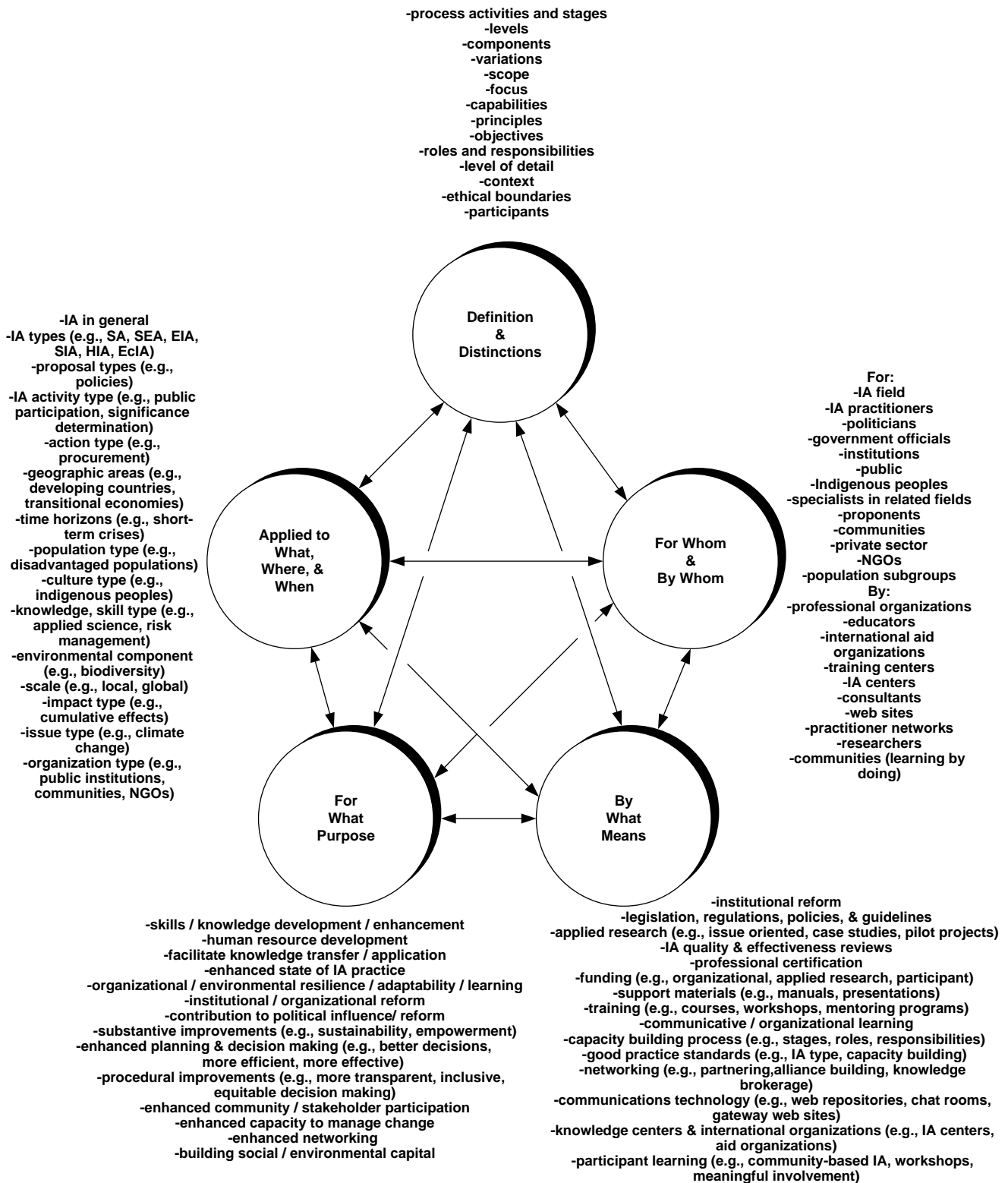


Figure 9.7 IA capacity building.

**Table 9.11** Examples of IA Capacity Building Good Practices

Regulatory Level—Facilitating Capacity Building	Applied Level—Undertaking Capacity Building
Fund IA capacity building and applied research	Be context specific
Institutionalize capacity building at multiple levels (e.g., international, national, regional, local); regional/local levels often especially in need of additional capacity building	Don't rush
Focus on institutional capacity; identify roots of institutional weaknesses; foster political and community support for IA and for capacity building	Target the right people to build a critical mass
Encourage active networking of individuals, groups, organizations, and institutions; foster alliance building and coordination	Emphasize mutual respect, accessibility, inclusiveness, openness, transparency, timeliness, trust building, and efficiency
Institute and support IA knowledge centers	Identify needs and build on existing capacity
Develop coherent institutional frameworks and governance approaches	Clearly define capacity-building objectives (e.g., sustainability, greater decision-making influence, enhanced skill sets, strengthened organizations, ability to commission, prepare or review IAs, more effective communications of IA)
Develop broad system (political and government) support for capacity building by IA type across government	Focus on needs and priorities of participants; respect value system of participants and foster self-esteem
Seek government-academic partnerships (e.g., courses, applied research, training)	Promote innovation and diversity; introduce innovative tools and methods
Foster a participatory, adaptive, continuous learning, and integrative planning model across government	Focus on problem assessment and remediation and major policy/planning choices; occurs within a framework of integrated/interdisciplinary problem solving
Foster greater IA awareness; make enhanced IA guidance a priority	Challenge mindsets and power differentials
Certify IA professionals	Test capacity building with pilot programs
Link IA capacity building to other planning levels and sectors	Use a wide range of capacity-building approaches
Recognize that education, mutual learning, and capacity building a continuing need and process	Emphasize active participation; establish positive incentives
Facilitate communications between agencies and IA practitioners	Make the training of trainers approach work
Evaluate capacities of IA authorities (leadership, structure, human resources, financial resources, interorganizational links), proponents, knowledge organizations (consultants, universities), and other stakeholders to effectively perform responsibilities and to participate effectively in process; target capacity-building initiatives to fill gaps	Ensure that capacity is built to acquire knowledge, improve skills, and apply outputs from skills and knowledge
Ensure feedback to government structures regarding capacity building effectiveness; upward information flow critical	Emphasize participant learning (i.e., learning by doing); foster participant "ownership"
Provide publicly available repositories of IA-type experiences	Emphasize organizational learning
Pilot test new capacity-building approaches	Ground capacity building on empirical evidence
Seek to harmonize IA capacity-building efforts with broader governance and environmental visions	Integrate case studies and examples
Commit to meaningful participation of public and of indigenous peoples	Promote best practice
Strengthen monitoring/auditing functions	Promote more equity focused decisions and greater gender parity
Link capacity building to actual assessment and reporting	Outreach to vulnerable groups
Links capacity building insights to IA legislative and regulatory reform and IA guidelines	Stay engaged under difficult circumstances
	Ensure process accountable; seek to demonstrate added value of capacity building; remain accountable to ultimate beneficiaries
	Apply specific criteria when assessing effectiveness of capacity building
	Document experience gained and lessons learned
	Share experiences (e.g., regional exchanges, self-help networks)

*Sources:* Birley (2004, 2007), Bond (2004), CIER (2009), Dannenberg et al. (2006), Devuyst (2000), Diduck and Mitchell (2003), Dimento and Ingram (2005), Dixon and Thérivel (2011), Doberstein (2003, 2004), Dora (2004), Dusik and Sadler (2004), Greig and Duinker (2011), George et al. (2001), Harris and Spickett (2011), IISD (2008), Kakonge (2006), Kolhoff et al. (2009), Kwiatkowski et al. (2009), Marshall et al. (2005), Morrison-Saunders and Bailey (2009), OECD (2006), Partidário (2011), Partidário and Wilson (2011), Sheate (2011), Shippey (2004), Simpson et al. (2005), Sinclair et al. (2009), Stewart and Sinclair (2007), Tang (2010), UNEP (2006), Van Gent (2011), Varghese and Nadeau (2004), Virji et al. (2012), Waldeck et al. (2003), Zhu et al. (2010).

vary among stakeholders and over time, and that context-specific adjustments will be critical. The resources available for capacity building often will be limited, especially in the current economic and political climate. Thus, difficult choices and trade-offs will be required.

The theme of capacity building is a recurrent one in IA literature (Bina et al., 2011). It tends to come up more often

when the quality of IA practice is viewed as especially weak (e.g., cumulative effects assessment, follow-up), when institutional arrangements tend to be lacking or very limited in terms of supporting IA practice (e.g., SEA, SA, HIA, SIA, policy IA, international treaties, transborder projects and effects), when particular environmental issues are considered especially critical (e.g., climate change, biodiversity),

when certain population groups tend to be marginalized from IA practice (e.g., indigenous people, local communities, gender inequities), and in geographic settings characterized by severe environmental concerns and limited resources (e.g., developing countries, transitional economies, “commons” areas such as the oceans, the Arctic, and the Antarctic) (Alshuwaikhat, 2005; Birley, 2004, 2007; Bond, 2004; Bond et al., 2011; Canter, 2008; Connelly, 2011; Craik, 2008; Dannenberg et al., 2006; Dixon and Thérivel, 2011; Doberstein, 2004; Dora, 2004; Égré and Senécal, 2003; Erlanger et al., 2008; Harris-Roxas and Harris, 2011; Kakonge, 2006; Larsen et al., 2012; Marshall et al., 2005; OECD, 2006; Parry and Kemm, 2004; Partidário, 2011; Partidário and Wilson, 2011; Simpson et al., 2005; Sinclair et al., 2009; Taylor et al., 2004; Vanclay, 2003, 2006; Varghese and Nadeau, 2004).

The range of situations where IA capacity-building initiatives would be desirable is, as suggested above, very wide. Compounding the problem is the propensity in many jurisdictions to curtail the resources available to government agencies to actively participate in the environmental review of proposed actions, thereby undermining existing IA capacity. These realities suggest that a general call for more IA capacity building, in a host of areas, is not likely to be effective. Priorities need to be collaboratively established, based on the consistent application of transparent and fully substantiated criteria. The effectiveness of existing capacity-building measures should be systematically evaluated. A particular effort needs to be made to develop and apply suites of capacity-building measures (e.g., networking strategies) that consume limited resources, are appropriate to the context, and have proven to be effective in a range of settings.

### 9.6.3 For Whom and By Whom

The target constituencies for IA capacity-building initiatives include, for example, IA practitioners, politicians, government officials, proponents specialists in related fields, the general public, local communities, the private sector, NGOs, indigenous people, and population subgroups (Booth and Skelton, 2011b; Chaker et al., 2006; IAIA, 2006a; Harris-Roxas and Harris, 2011; UNEP, 2004). An IA capacity-building initiative should necessarily be designed for and with the active participation of the target group or population.

A great many organizations and individuals are involved in facilitating and supporting IA capacity-building initiatives. International aid organizations (e.g., World Bank, UNEP, Asian Development Bank), IA and environmental professional organizations (e.g., IAIA, NAEP), and various knowledge centers (e.g., IA centers) have considerable experience in furthering the cause of IA capacity building. Also, numerous universities, consultants, individuals, educators, researchers, and training centers have participated in IA capacity building (Dimento and Ingram, 2005; Greig and Duinker, 2011). Increasingly, networks of IA professionals, NGOs, government agencies, and concerned and interested

individuals have shared IA knowledge and experiences (often through gateway web sites and chat rooms) in a manner conducive to IA capacity building.

Considerable care is needed to ensure an appropriate match is provided between IA capacity-building providers/facilitators and the IA capacity-building constituency. Familiarity with and appropriate adjustments to the context is essential. Again, the creative use of limited resources is likely to be essential. IA capacity-building initiatives, whereby the target populations “learn by doing” (e.g., community-based IA, community-based research), tend to “blur” the boundary between constituents and providers/facilitators (Cameron et al., 2011; Kwiatkowski, 2011; Sinclair et al., 2009). Such initiatives tend to consume limited resources and have secondary benefits such as community empowerment.

### 9.6.4 For What Purpose

A host of primary and secondary objectives have been identified for IA capacity-building initiatives. At the broadest level, there is the desire to raise the level of IA practice, both in general and in relation to particular IA types, settings, and impacts. Intermediary objectives tend to pertain to such matters as the transfer of skills and knowledge, enhanced networking, and human resource development. An enhanced level of IA practice (aided by capacity building) can contribute to more environmentally sound projects and decision making, to organizational/institutional reform, to greater political influence, and to more informed, open, transparent, adaptive, inclusive, efficient, and effective planning and decision making (Dimento and Ingram, 2005; Greig and Duinker, 2011; UNEP, 2006; Partidário, 2011). Enhanced IA practice, in combination with reformed institutions, planning, and decision making, can potentially contribute to such substantive environmental objectives as biodiversity enhancement, sustainability, growth management, the enhancement of social capital, and community empowerment (Bina et al., 2011; Gibson, 2011; IAIA, 2003; Partidário, 2011; Varghese and Nadeau, 2004; Wirutskulshai et al., 2011).

This chain of connections and consequences portrays IA capacity building as a catalyst for the realization of a host of organizational, procedural, and substantive objectives. For capacity building to reach its full potential, this suggests the need to systematically identify the interconnections between IA capacity-building initiatives (e.g., training, funding, participant learning) and broader institutional, procedural, and substantive objectives, coupled with the systematic evaluation of the effectiveness of IA capacity building. Such analyses should take into account other factors that could influence, positively or negatively, the expediting role of IA capacity building.

### 9.6.5 By What Means

IA capacity building can be facilitated by and/or can contribute to institutional reforms and changes to IA legislation,

regulations, and guidelines (Waldeck et al., 2003). Applied research, IA quality and effectiveness reviews, good practice standards, and IA knowledge centers and international organizations can all contribute knowledge, skills, and experience conducive to IA capacity building (Canelas et al., 2005; Greig and Duinker, 2011; Van Gent, 2011). Care must be taken to make appropriate contextual adjustments.

Training (e.g., courses, workshops, seminars, briefings, the training of trainers), support materials (e.g., manuals), the certification of IA professionals, and the provision of funding can augment institutional capacity, enhance practitioner and public authority skills and knowledge, and enable stakeholders to more effectively participate in IA (Birley, 2004; Dannenberg et al., 2006; Égré and Senécal, 2003; IAIA, 2006a; IISD, 2008; McCabe and Sadler, undated; Peterson, 2004; Shippey, 2004; Sinclair et al., 2012; UNEP, 2004). The capacity to conduct and meaningfully participate in IA can be augmented by networking (e.g., dialogue, mentoring, information exchanges, partnering, alliance building, coordination, regional exchanges) and communications technology (e.g., web sites, chat rooms, repositories) (Bond, 2004; Dannenberg et al., 2006; Dusik and Sadler, 2004; Harris and Spickett, 2011; Morrison-Saunders and Bailey, 2009; OECD, 2006; Shepherd, 2008; UNEP, 2004; Virji et al., 2012). The direct participation of interested and affected parties in IA (e.g., through community-based IA, meaningful public participation, and meaningful involvement of indigenous people) is both a potentially effective form of capacity building and a possible contributor to mutual learning, greater public influence in decision making, and community empowerment (CIER, 2009; Diduck and Mitchell, 2003; Fitzpatrick, 2006; Sheate and Partidário, 2010; Stewart and Sinclair, 2007).

IA capacity building is a process. It starts from a clear understanding of the factors influencing the capacity gap (Tang, 2010). It involves a series of stages and activities, and entails identifying the roles and responsibilities of participants (e.g., conceptual framework, stakeholder engagement, needs assessment, organizational structure, acquiring skills and resources, implementation, monitoring, and assessment) (OECD, 2006; Virji et al., 2012). The process should be designed and managed to meet the objectives, to be consistent with explicit ethical principles, to suit the context, and to be consistent with the needs, expectations, and values of the participants (Kwiatkowski et al., 2009; OECD, 2006; Zhu et al., 2010). Given the wide array of available capacity-building measures, particular care should be taken to ensure that the measures are appropriate and complementary (Kolhoff et al., 2009; Partidário and Wilson, 2011). Reference should be made to capacity building good practices and experiences in IA and in related fields (Dora, 2004; Partidário and Wilson, 2011; UNEP, 2006). Adjustments should be made as the process unfolds based on feedback from the participants. The effectiveness of the process, and its individual components should be independently evaluated against the objectives and from multiple perspectives. IA

capacity-building experiences should be shared among IA practitioners and with other participants, and should contribute to IA theory building. It is especially important, given contemporary resource constraints and political/bureaucratic resistance, to demonstrate the “added value” of IA capacity-building initiatives, and to obtain political and government support (Harris and Spickett, 2011).

## 9.7 SUMMING UP

This chapter describes a collaborative IA process—a process where the public is an active and ongoing participant. The three stories illustrate some of the complexities and subtleties associated with collaborative IA processes. The first story demonstrates that collaboration among stakeholders does not always lead to consistently understood and supported substantive environmental enhancements. The second story makes the point an effective IA process or system does not mean that all stakeholders should be uniformly satisfied with the outcome. The aim instead should be an IA system and process which all stakeholders can actively defend, where there is a high degree of cooperation, and where all parties have a sense of working for the “common good.” Time horizons, however, need to be extended, especially regarding the interests of future generations. The third story addresses the difficult task of facilitating stakeholder engagement at the policy level. It describes a stakeholder-based and participatory approach to TIA. The story illustrates that stakeholder collaboration at the policy level is practical, and can be undertaken in a manner that is highly communicative, technically sound, and effectively coordinated with existing assessment instruments.

Collaboration encompasses all forms of public participation short of delegation or shared decision making. Stakeholders jointly undertake a collaborative IA process. Noncollaborative forms of public participation are prerequisites or subsets. The problem is the gulf between the potential benefits of collaborative IA processes and the more modest benefits achieved by public participation approaches commonly evident in IA requirements and practices. The direction is exploring the potential for and means of making IA processes more collaborative. Six complementary elements of effective public participation practice are identified: (1) core principles and practices, (2) consultation, (3) communications, (4) mutual learning, (5) negotiations, and (6) collaboration.

Effective public participation has intrinsic benefits. It furthers human potential and offers numerous individual and joint benefits for the public and for decision makers. IA public participation practice often fails to realize these benefits fully. The possibility is raised that the shortfall occurs because of disadvantages associated with public participation or because of largely irresolvable issues associated with public participation practice. The public participation disadvantages are generally either dubious or overstated. They can generally be avoided, overcome, or

largely ameliorated. Restrictions to public participation in the IA process should always be justified. There are numerous issues associated with IA public participation practice. These issues pertain to conducting public participation activities, balancing conflicting perspectives, treating problems, obstacles, dilemmas, and uncertainties, and making difficult judgments. Rather than justifying restrictions to public participation, the issues underscore why issue identification, exploration, and resolution should be collaborative. They also point to the need to learn from public participation practice.

Examples of IA public participation goals, principles, and good practices are identified. Public participation methods are often placed along continua to demonstrate major methods' characteristics, their suitability for achieving different objectives, and their match to varying situations. Public participation methods can also be characterized by function or by operational characteristics. The characteristics, advantages, and disadvantages of categories of and individual methods should be considered before they are applied. Methods should be consistent with IA process goals and should be appropriate to the context.

*Public consultation or involvement* includes informing the public, integrating the views of the public, and interacting with the public, all prior to decision making. A public consultation process includes early consultation, initial and detailed planning, plan application and refinement, the monitoring of plan effectiveness during and subsequent to plan application, and postapproval involvement. Public involvement should begin early in the IA process and should be integrated into each IA process activity. Stakeholder identification is especially important. Information exchange, continuous involvement and outreach, and capacity-building methods can be applied. Formal involvement methods sometimes occur near the end of the process to present and test evidence. Public involvement plans are usually refined and adjusted through the process.

*Communications* is concerned with clear, focused, and understandable documents, the communications and advice-giving skills of IA practitioners, and undistorted and non-coercive dialogue and networking among IA participants. Applying procedural ethical principles, insights from IA practice stories, and effective argumentation could enhance communications in the IA process.

Education in the IA process is conventionally portrayed as educating the community. *Mutual education or learning* works both ways. It involves the parties learning together and potentially being transformed. The IA process should be treated as a learning process—an opportunity for all parties, individually and collectively, to enhance their knowledge and their intelligence capacity. The application and accommodation of traditional knowledge and concepts such as knowledge brokerage and organizational, social, collaborative, practical, critical, transformative, and sustainability learning could facilitate learning about and through the IA process.

*Negotiations* is concerned with avoiding, resolving, and ameliorating conflict in the IA process. ADR provides the IA process with a means of negotiations not limited to conventional administrative procedures or to litigation through the courts. Third parties such as mediators or facilitators should generally assist the process. ADR is not always appropriate. The appropriate conditions must be satisfied. ADR processes generally involve prenegotiations (e.g., conflict assessment, interest representation, designing the process), negotiations (e.g., initial deliberations, focusing, detailed deliberations, final refinements), and postnegotiations (i.e., implementation). ADR can potentially be integrated, in different forms, into several IA process activities. ADR methods range from unaided negotiations through procedural assistance (e.g., conciliation, facilitation, mediation) to quasijudicial mechanisms (e.g., minitrials, public hearings, arbitrations). ADR can culminate in formal agreements. Methods should be selected to suit the process objectives and the situation. ADR advantages and disadvantages should be considered when determining if, how, and when in the IA process ADR methods are to be applied.

Consultation, communications, mutual education, and negotiations, individually and collectively, can contribute to *collaboration* in the IA process. Collaboration is about people working together in a joint endeavor with substantive aspirations. Collaboration emphasizes perspectives, visions, opportunities, and creative joint exploration by IA process participants. Effective collaboration is inclusive and open, involves multiple perspectives and forms of knowledge, is procedurally fair, is jointly undertaken by stakeholders, seeks to creatively solve problems and take advantage of opportunities, and is directed toward and guided by substantive environmental management, environmental justice, and sustainability ends. Collaboration extends from a sound knowledge base and proactively involves all interested and affected parties, especially the public and local communities. It can be facilitated by networking, joint fact-finding, joint planning, consensus building, shared vision planning, and constructive engagement. It can be formalized through partnering and comanagement arrangements and agreements.

The IA administrative arrangements in the four jurisdictions are partially conducive to collaborative IA processes. They help ensure information exchanges with the public and outreach to less involved groups and segments of society. Additional emphasis could be placed on earlier, frequent, and continuous involvement, on involvement in screening documents, and on decision-making links. Communications to the public through IA documents is partially addressed. More advice could be provided regarding communications principles, communications skills, communications distortions, and facilitating dialogue. Much attention is given to educating the public about IA participation opportunities and practitioners about participation approaches. More attention could be devoted to integrating community and

traditional knowledge and to applying mutual learning concepts, methods, and practices. Considerable guidance regarding ADR is provided in the United States. More consideration could be given to the potential roles of ADR in the IA process. Collaboration among governments is well developed but in need of further refinement. Measures to facilitate stakeholder collaboration have received some attention. More consideration could be given to collaboration planning methods and frameworks and to facilitating collaborative IA processes.

The example of a collaboration IA process begins with an initial round of consultation, a conflict assessment, the formation of an advisory committee (the focal point of the process), interest representation, and public participation and IA planning. The IA process and public participation planning and execution are fully integrated. The various elements of effective public participation (involvement, communications, mutual education, negotiations, and collaboration) are integrated into IA and public participation planning, into major IA activities (e.g., scoping and needs analysis, alternatives formulation and evaluation, proposal and baseline characteristics, impact analysis, synthesis, and management, draft and final IA document preparation), into review and approvals, and into implementation. The effectiveness of public participation actions is evaluated during and subsequent to each stage in the process. The process is

built on a solid knowledge foundation and includes frequent and numerous links to the broader public.

Collaborative IA is expressed in different ways for various IA levels and types (e.g., SA, SEA, EIA, EcIA, SIA, HIA). A collaborative IA process needs to be designed and adapted to suit the IA types that it encompasses. Insights regarding collaborative approaches should be shared among IA type practitioners, appreciating the importance of contextual adjustments.

IA capacity building involves measures to enhance the quality and effectiveness of IA requirements and practices, as interpreted from multiple perspectives. It can be applied to IA as a whole or more specifically to various IA types, activities, settings, population subgroups, proposal types, impact types, environmental components, issues, time horizons, and organizational types and levels. IA capacity building necessarily entails collaboratively designing and managing the capacity-building process (definitions and distinctions), determining the area of application (applied to what, where, and how), selecting the constituency and capacity-building facilitators (for whom and by whom), deciding on the capacity-building objectives (for what purpose), and identifying, adapting, and integrating the capacity-building tools (by what means). Capacity building, in common with other IA aspects, builds on good practices at both the regulatory and applied levels.