



A framework for developing action competence in education for sustainability (EfS)

Teacher guide

Sustainability has been recognised by the New Zealand government as a key goal. For many years, education has been promoted as a critical driver for sustainability. In New Zealand, the Ministry of Education’s Statement of Intent 2007-2012 identifies sustainable development as a key education focus for the future. Supporting that intent, *The New Zealand Curriculum* lists sustainability as a future-focused theme that is “a rich source of learning opportunities ... that encourage the making of connections across the learning areas, values and key competencies’(p. 39)”.

One way of understanding learning in education for sustainability (EfS) is through the development of action competence. This is broadly defined as competence to act with reference to the environment or sustainability. The action competence framework has been developed to assist you as teachers to help your students achieve the development of this competence. This raises questions such as “What does action competence in EfS look like in students?” “Is there a range of approaches to developing action competence in students?” “How does action competence relate to the key competencies in the New Zealand curriculum?” “Does our school actively develop students’ action competence at the moment?” “If so, how is this done?” “How would we foster such development in teaching and learning in EfS?”

This teacher’s guide accompanies a **framework** for developing action competence in EfS which, hopefully, will help you to answer some of the questions raised above. The framework, which can be used by any New Zealand school, is a means for promoting discussion within a school and for scaffolding teaching and learning to develop action competence in EfS. These discussions, the outcomes of which are always formative, and never summative, will be led by your EfS facilitator.

The framework’s key purposes

What do people mean when they ask, “Are you developing action competence in education for sustainability (or environmental education) in your students?” Therefore the first purpose of this framework is:

1. Clarifying what is meant by the term “action competence” in EfS.

Action competence is having a broad range of competencies to guide appropriate action, and the ability, attitudes and values, willingness and opportunity to act. Therefore the focus is grounded in intentional actions which do something to achieve better outcomes for the environment and sustainability.

The action competence framework offers six aspects that support the development of student action competence. The six aspects are: experience, reflection, knowledge, visions for a sustainable future, action taking for sustainability, and connectedness. Each aspect has a definition underneath it to provide users with a consistent understanding.

The six aspects are viewed in a holistic way and not necessarily seen as linear starting at experience and finishing at connectedness. In fact, each aspect is part of an integrated whole. For example, reflection is often grounded in experience and taking action requires knowledge, a vision and the ability to connect things together. Action competence is complex and requires a high level of connectedness to achieve better outcomes for the environment and sustainability.

The framework attempts to show that the development of action competence is linked to international conceptions of EfS and the key competencies of *The New Zealand Curriculum*, as illustrated by the diagram in the framework.

The answer to the question: “Are you developing student action competence in EFS through your teaching and learning?” is not a simple “yes” or “no” response. There will no doubt be elements of these aspects already in your teaching. However, relevant questions are “How is it being done?”, “How is it connected in a coherent approach?”, and “How could it be further developed?”

This leads to the second major purpose of the framework:

2. Helping teachers and their EfS facilitators to develop student action competence in EfS.

The framework is an in-house brainstorming and discussion document suitable for use by individual teachers, departments, syndicates or the whole school, where, for each aspect, you can attempt to identify what is currently happening in your teaching. These six aspects can be viewed as fundamental to developing action competence. Therefore it is suggested that, however you choose to explore the framework, the six aspects underpin your discussion. The framework also provides the opportunity to discuss how the aspects are connected in ways that allow students to implement well-considered actions for the environment and sustainability. Each aspect has a brief explanation that considers what the learner and the teacher might do in the development of the aspect, and a number of suggestions as to the types of learning and teaching activities that might foster development of that aspect towards

action competence. The teacher and learner suggestions are examples; they are not a definitive list.

It is very important that these aspects are not viewed in isolation and that the outcome of any discussion explores the connectedness between these aspects as well as the notion of being connected (*The New Zealand Curriculum* p. 8) as critical for implementing well-considered actions. There are several levels of connectedness that could occur within the context of developing action competence through teaching and learning in EfS. It is not difficult to see the overlap in these aspects; this is hardly surprising given the integrated nature of EfS.

The following is not a definitive list but recognises possible levels of connectedness:

- connectedness across the six identified aspects
- connectedness across learning areas
- connectedness between the head (think), heart (feel) and hands (act)
- connectedness between the school and the community
- connectedness between learners and teachers
- connectedness between action competence and key competencies.

Some of the questions that might emerge from working with the framework may include, “Is it critical that we address each aspect for each of our students?”, “How are we connecting the aspects together?”, and “Do we currently have the knowledge and skills to develop action competence in EfS?”.

In fact, you and your school may already have a well developed approach to developing student action competence, which includes a range of initiatives that model effective student-led and teacher-supported action. Therefore, for you and your school, a third purpose of the framework may apply:

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| 3. Identifying evidence by which teachers could assess development of student action competence in EfS. |
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The framework suggests sources of evidence in a school that may provide evidence of development of student action competence. These could be many and varied. The assessment of development of student action competence is a new and evolving field so we offer this purpose of the framework as a tentative step forward.

It is important to note that EfS in a school should not exist entirely and solely within one learning area. Rather it may be a stand-alone offering that draws together many or all learning areas, or it may be integrated within many or all learning areas. Whichever approach is taken to EfS delivery, it is not necessary to see EfS as yet another thing to assess. Rather the aspects of the action competency framework permit exploration of how student action competence can be developed whilst meeting other curriculum objectives. Note, however, that at NCEA levels 2 and 3 currently, there are specific EfS Achievement Standards available at <http://www.nzqa.govt.nz/ncea/index.html> (Search: environmental sustainability). Development of student action competence may or may not ever become an item that you report against to parents or ERO, but all the aspects within the action competency

framework and the suggested evidence sources for it are representations of good teaching and learning outcomes. The framework is designed to promote in-house discussion of how to develop students' ability to live more sustainably in the future.

Hopefully, in fulfilling one or more of these three purposes, the framework can make a valuable contribution towards education for sustainability in your school.

Please forward any feedback about the framework to Dr Chris Eames, the director of the team of researchers who have developed it as part of a Teaching and Learning Research Initiative project. Chris's email address is: c.eames@waikato.ac.nz.