

Using training indicators to improve planning for vocational education and training

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Responding to the need for information about labour market changes, skill shortages and social and economic indicators, this paper proposes training indicators for vocational education and training (VET) policy and providers. The idea is to develop indicators that will inform VET providers about changes in the nature of training demand flowing from demographic changes and from labour market adjustments - related to new areas of training demand or related to industries undergoing restructuring because of changes occurring in the economy.

The paper is based on the author's recent NCVER project and report in preparation. That project flowed from a critique (Blandy and Freeland 2000) of various approaches to measuring the adequacy of the 'stock of VET skills', which is a key performance measure for the VET system as a whole.

In addition to reviewing relevant VET literature and contemporary national and State VET plans, the project and its report have had the benefit of advice and commentary from Commonwealth and State employment or training departments, TAFE institutes, and other education and training consultants.

Here, training indicators are taken to mean functional suites of quantitative and qualitative indicators of current or future VET supply and demand, potentially including economic, social, labour market, training and other indicators, which governments, enterprises, training providers or individuals may bring together to guide decisions about investments for skill training, especially at the industry, occupational, regional and course levels.

Such indicators are crucial to the VET planning cycle. To implement the National Strategy for VET and give best effect to the pool of VET funds, the Australian National Training Authority (ANTA) and State and Territory VET agencies use a wide range of training indicators in developing and reviewing their VET plans. Training indicators are an important occupation for NCVER itself, particularly in terms of key publications on enrolments, apprenticeships and traineeships, and student outcomes.

The current levels of demand for training indicators can be related to recent developments in the training system and in the training market, particularly the National Strategy (Australian National Training Authority 1998) and Key Performance Measures (Australian National Training Authority 1999), or 'KPMs' for VET. The current Strategy's market emphases, and the new diversity of training providers and pathways to skills, imply increasing needs for diversified training information to improve the operation of the market.

Pre- and post-ANTA, major Commonwealth, State and other uses of training indicators since the 1970s can be classified and described. These include uses for youth education and training, training policy, skilled migration, job placement needs and vocational guidance. The author's assessment is that this ongoing work has proved its worth for policy and program purposes, especially when it successfully synthesises major demand-side and supply-side training indicators, or derives actual measures that compare training demand to training supply.

Recent initiatives in the VET sector (new VET student and employer surveys began in 1995 – see NCVER 1999a and 1999b) and in employment and education (there are fresh approaches to job outlook and student information programs – see DEWRSB 2000 and Ashenden and Milligan 2000) create fresh possibilities for the better use of training indicators in VET planning and in vocational guidance.

State and regional VET plans are increasingly the place where the important VET decisions are made and training indicators can have a major impact. Whereas published State and regional VET plans (for example DTWA 1999 and OTFE 1999) appear to be organised primarily along industry lines, unpublished TAFE institute-level plans appear to be expressed more in terms of the (adjustments to) provision of educational *courses* that will give effect to industry and regional planning priorities.

Useful directions for the practical use of training indicators can be discussed, as below, in terms of: the national planning background; the place of indicators in VET planning; the market for training indicators; needs and gaps for indicators; classification, forecasting and resourcing issues; and the aptness of indicators for the VET climate.

Training indicators help in meeting the needs of the National Strategy and the measurement framework for the VET system. In recent years, they have often been developed to assess stocks of skills and client outcomes, items that have now become KPM 2 and KPM 4.

A range of supply and demand training indicators are used in national and State VET planning and region-industry planning. There appears to be limited formal assessment of the usefulness and accuracy of the indicators used in developing successive plans. The processes and indicators used for VET performance measurement and evaluation tend to follow somewhat different tracks to those used for VET forward planning.

There is evidence of persistent demand for the 'public good' of training indicators. NCVER responds to demands for training indicators with a range of national and State analyses of VET enrolment, training and student outcomes. For State VET planning purposes, States and Territories can and do supplement these analyses with their own systems data on VET students, other statistical analyses and industry survey sources.

With increasing diversification and deregulation of the training market, there are important needs and gaps for training indicators directed to regional and TAFE institute planning processes and decisions. The tools and indicators available at these levels can be improved.

Institute planning and the use of indicators for institute comparisons are issues of some sensitivity. There is continuing debate about the most useful frameworks (industry, discipline, field of study or unit of competency) for VET planning and indicators, and the extent to which the preferred array of training indicators should emphasise (industry) forecasts.

The preference among State VET planners appears to be to use industry and occupational forecasts as just one, and not necessarily the predominant, set of training indicators that contribute to VET plans and planning decisions. This seems reasonable if VET systems are taken to have both leading and following roles in developing skill solutions for industry and individuals.

The debate tends to focus on the best techniques and training indicators for VET planning, but continuity in VET organisational resources and expertise is just as important as technique in improving judgments and inferences. Resources and expertise, in NCVET and State VET agencies, matter greatly if training indicators are to make their best contribution to sustainable improvements in VET planning.

To emphasise this point, it may be noted that available and current training indicators have been used successfully to make judgments about some of the critical VET policy questions (for example, the quantity and quality of traineeships).

Over 2000-2005, these indicators offer suitable measures to assess prospects and performance in a VET system under policy and resource stresses, and flexible measures to examine VET responses to changing industry, skill and demographic trends. In particular, training indicators can be used to analyse important and topical lines of inquiry (including youth transition issues) that follow from the basic concept of KPM 2 - stocks of VET skills against desired levels.

The full report of the author's NCVET project develops summary propositions for good practice in the use of training indicators; for developing the range of training indicators; to improve the implementation of KPM 2; and to improve the dissemination of training indicators for VET planning.

Distilling the project results, the table below proposes a selection of training indicators – on the demand side, on the supply side, and comparing demand to supply – that may be used for improving assessments of changing VET demand at national, State and regional levels. The table presumes that indicators would usually need to be applied to particular industries, disciplines and fields of study.

Table 1: Selected training indicators for assessments of changing VET demand, at national, State and regional levels

Training demand indicators (for a nominal industry)	Training supply indicators (nominal industry, discipline or field of study)
<p>Output and productivity, growth forecasts</p> <p>Employment, recent employment change, growth forecast</p> <p>Assessment of 'strategic importance' (of an industry to the economy)</p> <p>Industry characteristics (size and distribution of firms)</p> <p>Industry training needs (emerging or contracting skills demands)</p> <p>Replacement demand levels</p> <p>VET graduate employment and salaries, and trends</p> <p>Employer and student satisfaction, and trends</p> <p>Job market trends (wages and conditions) (regional) demographics</p>	<p>VET funding and trends</p> <p>Training providers (numbers, types, locations and trends)</p> <p>Training activity and trends</p> <ul style="list-style-type: none"> • students, enrolments, hours and trends <p>Training trends in detail</p> <ul style="list-style-type: none"> • course enrolments, levels, completions and trends • Enrolments by package (Competencies), and trends • Contracts of training, completions, and trends • Module enrolments, completions and trends <p>Shares of training market (by provider, by pathway, by level)</p> <p>Other supply sources (existing workers, retraining, migration)</p> <p>(Regional) enrolment demographics</p>

Derived measures (comparing demand to supply)

Output or strategic importance (of an industry in the economy) vs VET funding levels

Employment levels vs VET funding levels

Employment levels vs levels of training hours

Employment levels and trends vs enrolments, contracts of training, completions

Growth and replacement needs vs training completions

Regional demographics vs regional enrolment demographics

Industry market needs vs training trends and training market shares

Suggested direction of training effort (+, 0, -)

Suggested training gaps and (purchasing) opportunities

Note: The indicators and the comparisons may be quantitative or qualitative.

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