

The Review of Tertiary Entrance in Queensland 1990: Report submitted to the Minister for Education

Queensland. Department of Education, 1990 (Tertiary Entrance Reviewer: Nancy Viviani)

Overview of the document

180 page review into tertiary entrance procedures commissioned in the wake of the abolition of the Tertiary Entrance (TE) score. The main report systematically considers the issue involved and makes 10 recommendations for the introduction of a new system. The discussion is supported by four appendices.

Keywords

Assessment; curriculum; tertiary entrance; student profile; post-secondary education; moderation; scaling; comparability.

Terms of Reference

1. To review the present system for the compilation of Tertiary Entrance Scores in Queensland.
2. To recommend an alternative system; seven limiting parameters are listed.
3. To consult with Tertiary institutions concerning the ways in which the alternative system would be used.
4. To recommend administrative and operational arrangements.

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MAIN REPORT

1. Making decisions on entrance to tertiary education

- Notes that tertiary entrance decisions have far reaching impact on curriculum and assessment in schools and that wider changes, such as students staying longer at school, affect tertiary entrance.
- Notes that “This review supports the values that underpin [the] ongoing process” characterised by:
 - the abolition of the external examinations in the early ‘70s that broke the University of Queensland’s (UQ) direct control over secondary education;
 - the subsequent Radford reforms that led to increasing autonomy of schools in development of curriculum and assessment, widening of course offerings, and professional upgrading of teachers; and
 - the ROSBA reforms of 1980.
- Notes that the abolition of examinations also led to the introduction of the Tertiary Entrance (TE) score in 1974 but that although it was intended to be only one of several criteria, universities used it as the principal criterion, and employers used it inappropriately.
- Notes that for a time the use of the TE score was basically fair, but with changes to school populations and the increased scarcity of university places, the use of a single score has become ever less satisfactory and public concern has grown throughout the 1980s.
- Notes that in 1987, the Pitman Report into tertiary entrance was released, providing a workable solution, but due to the opposition by the University of Queensland (UQ) and ministerial changes, the suggestions were not acted upon.
- Notes that the Goss government abolished the TE score with effect from 1992 and established this review.
- Argues that the intention of this review is not to make far-reaching changes to secondary education, unlike the earlier Radford and ROSBA reports, but to make the universities rethink their approaches to tertiary entrance, taking into account broader social impact.
- States that “The main intention of this review is to find a policy-making solution to the current problem in tertiary entrance in Queensland, one that will also allow future problems to be foreseen and addressed. This requires a structure where schools and universities can negotiate their different interests” which will be an “evolutionary process, always subject to the impact of social change.” (p. 1)
- Argues that the current tertiary entrance problem is due to the fact that the decision on who should enter university is so important and that while schools want to prepare their students in the best possible way, universities want to select the most suitable students.
- Argues that consultation, negotiation, and co-operation between schools and universities to achieve good and publicly accountable outcomes are necessary and that such a process has broken down in Queensland.
- Notes that the problems with the TE score as the sole basis for deciding tertiary entrance has been long recognised by those involved and that there is currently no public confidence in the methods used.
- Argues that as there is no effective decision-making structure reflecting respective interests and responsibilities and where TE procedures and problems can be discussed

and that the policy guidelines protecting the public interest are lacking. Notes that the main recommendation is for a structure to “enable the development of good tertiary entrance procedures”. (p. 4)

- Makes the following recommendation:
 - Recommendation 1. Decision-making on tertiary entrance: The Queensland Tertiary Entrance Procedures Authority (TEPA)
 - “The Government should move immediately to set up a statutory body whose chief responsibility would be to advise the Minister for Education on tertiary entrance procedures in Queensland.” (p. 4)
 - The body should have two main tasks:
 1. to provide students with the information they require to enter tertiary education. This information on overall achievement and other specific measures of achievement, to be issued on a separate Tertiary Entrance Statement together with that on the Senior Certificate, will form the Student Profile for tertiary entrance.
 2. to monitor, review and advise the Minister on modifications to tertiary entrance procedures.
 - “This single reform, making schools and universities responsible jointly for their actions relating to tertiary entrance procedures provides a way to deal with current and future problems concerning the transition from school to university.” (p. 4)

2. Changes in Post-Secondary Education in Queensland

- Notes the need to respond flexibly and constructively to changes taking place in post-secondary education.
- States that “One such change is that universities are no longer institutions producing a relatively small elite in professional and academic terms” and notes that previously, “students bound for university were effectively ‘streamed’ at the end of Year 10.” (p. 5)
- Makes the following points:
 - In 1989 almost 70 percent of students were completing Year 12 most of whom were seeking some pathway into post-secondary education.
 - While the student population is now more heterogeneous, most have aspirations for study at university: one third of Year 12 students enter directly, but 45 percent take up university study eventually, illustrating “higher retention in schools and the scarcity of university places”, as well as a tendency to defer entry. (p. 5)
 - In regards to the expansion of pathways from Year 12 to post-secondary, “Many more students now go to university than in the past and take a much wider range of courses of a training, vocational and professional kind.” (p. 5)
 - There has been an expansion of TAFE colleges and the accreditation of private colleges, all for a valuable objective: “the upgrading of education and skills of many more Australians so that we can manage our economy and society more effectively in a very competitive world.” (p. 6)
 - Hence “broad changes in managing tertiary entrance are now necessary, and have become more urgent”. (p. 6)
 - Information provided by schools on student achievement has multiple users, so consultation and negotiation on tertiary entrance in the context of TEPA

should include the TAFE sector. There is also public interest in these procedures. (p. 6)

- Makes the following recommendation:
 - Recommendation 2: The Structure of The Queensland Entrance Procedures Authority (TEPA)
 - The Minister should appoint 9 representatives to an Executive Committee: 2 ministerial, 3 from schools through the Board of Senior Secondary School Studies, 3 from universities and 1 from TAFE sector, with independent chair.
 - It should have a Reference Committee of students, parents, schools, tertiary institutions and employers, with same chair as Executive Committee, and a small technical advisory group.
 - “It is important to stress here that a principle of openness and accountability should be adopted not only in the TEPA process, but by all players in that process in their separate as well as joint responsibilities. This openness principle has been insufficiently evident in the past.” (p. 7)

3. The four parts of the tertiary education entrance problem in Queensland

- Discusses the supply/demand problem and notes the following:
 - Because of Queensland’s population growth and the increase to now 80 percent of students staying after Year 10, there is increased demand for post-school education.
 - The supply of university places in Queensland in particular has not kept pace with this increasing demand.
 - Hence the “first and major part of the tertiary entrance problem...is a structural one of a shortage of places”. Queensland has been “persistently disadvantaged relative to other states, in federal funding for tertiary places.” (p. 8)
 - Recent increases in federal and state funded places have eased the supply problem, but in 1989, 4000-6000 students were unable to enter a university in comparison to 20,000 who did. Pressure on university entry will continue in the absence of significant change in the supply of places.
- Makes the following recommendation:
 - Recommendation 3: Shortage of University Places
 1. “The Minister for Education should press the Federal Government for an immediate and substantial increase in university places for Queensland, in order to redress the past and current pattern of its disadvantage relative to other states.” (p. 12)
 2. “TEPA should monitor the supply and demand for university places in Queensland.” (p. 12)
- Discusses the “Second Go” problem and notes the following:
 - In 1989 some 25 percent of those entering a 1st year university course were “second go” students, that is those who missed out initially on a place in a high demand specific course and subsequently entered it after getting good marks in another course.
 - Another 25 percent do not come directly from Year 12 in Queensland schools (for example students from interstate, mature age, special entry students etc.).
 - This other 50 percent compete directly with Year 12s for entry into specific courses of high demand.

- Universities deal with this in two ways:
 1. through the assignment of notional TE scores (NTEs) to the other 50 percent; and
 2. the use of sub-quotas, thereby separating the competition for places between the two groups.
- Despite these efforts to ensure equity, further action to address the problem needed.
- Makes the following recommendation:
 - Recommendation 4: Second Goes and “The other 50 percent”
 1. Year 12 students should be made better informed of the ‘second go’ route, which should be encouraged.
 2. Methods by which Year 12 students and the other 50 percent are compared should be reviewed to make sure they are “equitable, publicly known and accountable”. (p. 16)
 3. Use of sub-quotas should be expanded.
 4. “Qualified TAFE college graduates seeking entry to university should not be disadvantaged.” Course accreditation and credit transfer between institutions should be tackled. (p. 16)
- Argues that, more generally, “existing methods of making diverse applicants ‘equivalent’ will no longer do.” (p. 16)
- Discusses the TE score and entry to university in 1990 and 1991 and notes the following:
 - The TE score was a number that denoted the measure of a student’s overall school achievement, and was used to demarcate course quota levels (“TE score cut-offs”). (p. 17)
 - “On balance, it should be said that if a single rank order like the TE score is to be used to assign places in university courses, the one we use in Queensland is about as fair as it can be made.” (p. 17)
 - However, “it became clear over time that the use of a fine grained score could not distinguish among the increasing numbers of students who were...essentially equivalent applicants for entry to high demand courses”. This “became a central source of inequity in the use of the TE score.” (p. 17)
 - Barry McGaw has stated that: “It would be better to use the aggregate to identify a group of students either side of the cut-off...and then to inspect the performances of those students in more detail.” (p. 18)
 - Because employers used it inappropriately to distinguish among job applicants, because of the way it was constructed, and because it became the central focus for students and parents at the expense of other educational objectives, the TE score became open to widespread criticism. But it was its inability to distinguish between essentially equivalent students that led to critical loss of public confidence and its abolition.
 - The reason the situation was not remedied previously was because schools and universities did not have “an effective consultative decision-making mechanism” in which to negotiate a solution.” (p. 19)
- Makes a number of other comments on the socially undesirable effects of the TE score, and the good effects abolition of the TE score would bring.

- Makes the following recommendation:
 - Recommendation 5: Students applying for university in the transition period, 1990 and 1991.
 1. Students should be ranked on the basis of the TE score as at present.
 - 2-4 Students on either side of the cut-off point for entry to specific courses should be considered in detail and admission given to all adjudged equivalent. (p. 20)

4. Five working principles

- Notes that in order to avoid confusion and instability during transition to new system, the following recommendations are made:
 - Recommendation 6:
 1. The role of school-based assessment should be retained.
 2. The setting of prerequisites should remain more or less the same for the transition period.
 3. A single Senior Certificate should continue to be produced, with additional information required for tertiary entrance issued on a separate Tertiary Entrance Statement by TEPA.
 - Recommendation 7:
 1. University-school linkages should be strengthened for the provision of better information on courses and entry requirements.
 2. Expansion of career education in schools is desirable.
 3. Universities need to review their liaison and extension services to schools.
- Identifies five working principles on which the new tertiary entrance method will be based. These are as follows:
 - Lifelong education as a public and private good:
 - Lifelong education means that “entry and re-entry to universities at different points in people’s lives” is seen as “valuable, both in public and private terms.” (p. 21)
 - An “overall objective for equity in higher education” is in “changing the student population to reflect more closely the composition of society as a whole”. (p. 22)
 - “This has profound implications for selection to universities and it is clear that such decisions cannot be encompassed within a single TE score.” (p. 22)
 - “No single selection criterion, such as the TE score, can select adequately now, or in the future among such a diverse range of applicants.” (p. 23)
 - Matching student choices with university selection criteria:
 - “It follows logically now, and for the future, that highly competitive courses at universities (along with all others) need to use multiple selection criteria to match students to courses.” (p. 23)
 - A distorting effect arises from mis-matching students with courses using of single scores.
 - A Two-Gate Approach to Tertiary Entrance. A Student Profile System:
 - There are four pieces of information that together form the Student Profile:
 1. Subject level of achievement - Senior Certificate
 2. The new test - Senior Certificate
 3. Overall school achievement - Tertiary Entrance Statement

- 4. Performance in fields of study - Tertiary Entrance Statement.
 - “This student profile could be placed in a student portfolio” with other relevant material. (p. 27)
 - “Universities can use all or some of this information in various combinations in their selection decisions.” (p. 27)
 - TEPA has a critical role in this process of student transition from school to university.
 - This could be called the Student Profile System.
 - Alternatives to this process that have been suggested are: streaming students from Year 10 (unacceptable); instituting a Year 13 as a gate for selection; and instituting a common first year at university. The latter is seen to have important educational advantages, but practical difficulties.
- Responsibility and accountability in Tertiary Entrance Decisions:
 - Discusses procedural issues including the dual institutional focus provided by TEPA and QTAC.
- Implementation and Resources:
 - Notes the importance of following through new policies with adequate resources.

5. A Strategy for Resolving the Current Problem

- Discusses the importance of embarking on a process of incremental reform. (p. 33)

6. A Three-Part Method for Tertiary Entrance

- Before outlining the three-part method, provides the reasons for not bringing back exams or introducing a scholastic aptitude test.
- Notes that the important point to make is that no single method will work well and that in order for universities to make good selection decisions, as much information possible in a variety of combinations needs to be used.
- Notes that the new method to be recommended has three parts:
 - The Overall Position or OP:
 - Notes that this is useful for university selection because it is one indication of students’ general capacity in the school environment. Notes that it offers the same measure of overall achievement as the TE score, but is less fine grained.
 - Outlines the details of how the OP is to be constructed. The main points are that scaling both within schools and across schools is to be done using the Core Skills test and that the measure of overall student achievement is to be stated as an OP on a rank order of 25 bands (as opposed to the 100 bands of the old TE score).
 - Defends the continuation of scaling to compare student achievement within subjects and more particularly across subjects. States “If we do not scale students’ results before adding them together, then we make the whole system unfair.” (p. 38)
 - Notes that Section 7 outlines a method involving improved moderation procedures that may replace scaling within subjects.
 - The Field Position or FP:
 - States that “Field positions tell us how well a student did, relative to others, in that set of subjects that emphasises these particular skills.” (p. 39)

- States that “Field positions are constructed by weighting subjects according to the relative emphasis placed on different dimensions of achievement in each subject. We can use four dimensions (or areas of skills).” (p. 40)
- These four dimensions are identified as follows:
 - Field A: extended written expression involving complex analysis and synthesis of ideas;
 - Field B: short written communication involving reading comprehension and basic English expression;
 - Field C: basic numeracy involving simple calculation and graphical and tabular interpretation; and
 - Field D: solving complex problems involving mathematical symbols and abstractions.
- Argues that these dimensions are “clearly useful in selection for some high demand tertiary courses”. (p. 40)
- States that “Universities are expected to give most emphasis to the Overall Position, using the Field Position and other information as subsidiary factors in selection.” (p. 40)
- Notes that a table of weights applied to subjects will be made available to each student, along with a schedule of university courses setting out prerequisite subjects and fields to be considered in selection. (p. 40)
- Discusses the construction, use and likely effects of FPs and notes that as FPs are generally irrelevant to performing, creative and practical arts, perhaps more fields need to be addressed. (p. 40)
- The Core Skills Test:
 - Comments on The Australian Scholastic Aptitude Test (ASAT) currently used for scaling, and the contempt in which it is held (notes that this is largely due to misunderstanding and dislike of results being compared and scaled in general).
 - Notes that ASAT will be replaced by a new Core Skills Test (CD Test), which will have two purposes: to scale students’ results so as to obtain OPs and FPs for each student; and to be made available on the Senior Certificate so it can be used as an additional factor in university / TAFE selection.
 - Outlines the CS Test and the publication of its results. Notes that it should be reported on a blunt 5-point scale (A-E) to avoid the misuse of the finer grained TE score by universities and employers that was “the source of most of our present troubles.” (p. 44)
 - Discusses how and by whom the CS Test should be constructed. The main features (set out more fully in Appendix IV) are that it: be closely related to the skills taught in the Queensland curriculum; test basic English expression and numeracy; take in account wider abilities for the scaling of the OPs, more specific sets of skills for scaling the FPs, and its usefulness in its own right; and that it should be derived from the curriculum, rather than setting the curriculum.

- Makes the following recommendation:
 - Recommendation 8: The Adoption of the Three-Part Method for Tertiary Entrance
 - “The government should adopt the Three-Part Method of Tertiary Entrance as follows:
 1. A measure of overall student achievement at school expressed as a position in a rank order (the Overall Position or OP).
 2. A measure of student skills in specific fields of study at school also expressed as a position in a rank order (the Field Position or FP).
 3. The student’s individual results in a new Core Skills Test (CS Test) which is taken by all Year 12 students, and is stated on the Senior Certificate.” (p. 46)
 - The BSSS is to make this information on OPs, FPs and CS Test results available to TEPA and to the students. Along with levels of achievement on Senior Certificate this will form the Student Profile.
 - The TEPA is to monitor this process.
- Discusses issues concerning decisions on university selection and concludes that:
 - The OP is “the best measure of the three by far” and should be “given most weight in selection”. (p. 47)
 - The FP “is a partial measure of some skills in some parts of the senior curriculum” and its main role “is to help distinguish between those students of equal calibre within an OP band”. (p. 47)
 - The CS Test is less valuable than the OPs and FPs and “should never be used on its own to decide university admission or among job applicants”. (p. 47)
- Makes Recommendation 9 relating to the setting up of an appeals process to universities. (p. 48)
- Briefly discusses issues to do with the other 50 percent and Queensland students applying to interstate universities. (pp. 48-49)

7. A Two-Part Approach to Comparability of Assessment

- Notes that “there is widespread concern about comparability of assessment” among students, parents, teachers universities and other groups. (p. 49)
- Discusses the problem of comparability of levels of achievement within subjects in some detail. Suggests that the three processes of accreditation, moderation and statistical scaling should be used in combination, and that this forms the core of the Radford and ROSBA reforms. Argues that if this could be done successfully, “then we can have more confidence in the comparability of assessment within subjects. This would allow us to remove one scaling step.” (p. 52)
- Makes Recommendation 10 which pertains to the conducting of research into the comparability of assessment in Years 11 and 12, and the setting up of a committee by the BSSS to report on assessment and moderation processes. (pp. 52-53)

8. Implementation and Resources

- Notes that “The implementation process will require three agenda for action in successive phases:
 - Agenda I: the policy adoption phase.
 - Agenda II: the phase of implementation of the recommendations.
 - Agenda III: the continuing review and reform of tertiary entrance.” (p. 54)
- Sets out some tentative thoughts on these Agenda.

- Considers the costs that will be involved in carrying out the recommendations.

9. Concluding Remarks

- Notes that there will always be competition for high demand university courses, and hence complex procedures for selection are necessary to ensure equity. (pp. 58-59)

APPENDICES

- Provides the following four appendices which give richly detailed background to the Review:
 - I-1. Tertiary entrance in Queensland: the origins of the problem.
 - I-2. Supply and demand in tertiary entrance in Queensland.
 - II. The TE score system: its strengths and weaknesses.
 - III. Options on methods of tertiary entrance.