

INQUIRY INTO THE RECRUITMENT AND TRAINING OF TEACHERS

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Theme:

Summary



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Standing Committee on Social Issues
Legislative Council
Parliament House
Macquarie St
Sydney NSW 2000

Dear Chairperson

Inquiry into Recruitment and Training and Training of Teachers.

Please find attached a joint submission I wish to present to the Inquiry into Recruitment and Training of Teachers being conducted by the Standing Committee on Social Issues of the Legislative Council. This submission is made on behalf of, and with the authorisation of, the professional teacher associations that represent Industrial Arts teachers in NSW – The Institute of Industrial Arts Technology Education and the NSW Industrial Arts State Equipment Committee. The comments made in the submission have been edited and collated from those sought widely from the membership of both associations.

The submission has three distinct sections:

- a combined summary and table of contents,
- the body of the submission; and
- recommendations.

The submission contains 35 pages including this covering letter

Our associations wish the committee well in this important matter and look forward to reading the findings and recommendations that emerge as a result.

Yours faithfully

John Perdriau

(President)

SUMMARY OF SUBMISSION

Introduction – Page 5.

TERM OF REFERENCE 1: The best means of attracting quality teachers to NSW Public Schools and meeting the needs of school communities – Page 6.

- The role of the Department of Education and Training (DET) and the political establishment.
- Discussion of the disconnection of teachers, DET and universities in relation to a number of factors including: initial teacher education, ongoing professional development and impact of this on teacher morale which may influence school students in considering teaching as a career choice.
- The importance of subject disciplines and in secondary education
- Some problems within the TAS KLA for Industrial Arts

TERM OF REFERENCE 2: the effectiveness and efficiency of current means of recruiting teachers to NSW Public Schools, including: recent graduates, career change teachers- Page 10.

- Recruitment of teachers.
- Retrained teachers and accelerated trainees.

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- Changes in administration within DET since the late 1980's and the impact on accountability and support systems.
- There has been a change in the relationship between Industrial Arts teachers in schools and those in tertiary institutions.
- The accumulation of skills and knowledge into subject disciplines, which reflects the notion of subject integrity, is important in secondary education, particularly within Industrial Arts subjects, and in disciplines at the tertiary level of education be it in universities or TAFE.

- Criticism of the structure for delivery of the curriculum in secondary education through KLAs, and the application of KLAs to teacher education requirements particularly in relation to Industrial Arts within the TAS KLA.
- Anomalies between KLAs: with reference to the Industrial Arts discipline within the TAS KLA, teacher education, and accreditation.
- Issues regarding beginning and retrained teachers in secondary schools.

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TeachNSW

- Assessment of TeachNSW materials with reference to Industrial Arts.

Scholarships for undergraduates

- These are supported and DET should encourage professional associations to promote this initiative.
- Reimbursement of the annual HECS debt, while teachers remain employed with DET.
- Payment of fees for teachers who undertake appropriate postgraduate study.

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- Understanding of the Institute of Teachers' role by the teaching profession. It will need to demonstrate that it is of real value to teachers.
- There is a need for ongoing and meaningful dialogue between teachers, their professional associations and the Institute of Teachers.

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- Outcomes of teacher education programs.
- Concerns with current TAS KLA teacher education programs accreditation criteria for potential Industrial Arts teachers.

- Retraining programs by further part-time study.
- A number of issues specifically related to Industrial Arts teacher training programs, associated facilities and locations are discussed.

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- Occupational Health and Safety
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**SUBMISSION BY INDUSTRIAL ARTS TEACHER ASSOCIATIONS TO THE SOCIAL ISSUES
COMMITTEE OF INQUIRY INTO THE RECRUITMENT AND TRAINING OF TEACHERS**

Introduction.

Industrial Arts teachers congratulate the former Minister for Education and Training (Dr. Andrew Refshauge) in commissioning The Social Issues Committee (SIC) to inquire into the recruitment and training of teachers. This is a very important inquiry as it is those recruited into teaching that carry the responsibility of delivering the learning programs to students in NSW schools as well as a number of associated professional tasks.

Allied to this inquiry is the issue of the drift of students and teachers away from Public Education. This may be a symptom of the overall perceptions about schools and teachers. It also points to and suggests the possibility of faults in the Administration of some aspects of Public Education.

This inquiry has the potential to draw together aspects of a number of recent educational reports. This submission attempts to provide the inquiry with the considered opinions of Industrial Arts teachers, as represented by the Institute of Industrial Arts Technology Education (IIATE) and the NSW Industrial Arts State Equipment Committee (NSWIASEC).

TERM OF REFERENCE 1:

The best means of attracting quality teachers to NSW Public Schools and meeting the needs of school communities

The educational bureaucracy and the wider political community have key roles in relation to this term of reference. One of the key roles of the educational bureaucracy should be to develop and apply an administrative structure that is aimed at providing the delivery of the curriculum in the best possible way. The delivery of the Curriculum and the support of teachers teaching and students learning should dominate educational administration. In a democracy the bureaucracy also has the responsibility of responding to the policies of the government of the day. There is sometimes a tension between these two requirements. The balance seems to have been disrupted since the late 1980's where the accountability of the bureaucracy in implementing government policy has drawn its attention away from the actual needs of delivering the curriculum, and from supporting teachers teaching and students learning. This is not to say that governments should not influence educational policy. They do and have a particular role in ensuring all stakeholders and the interests of the wider community are heard by the education bureaucracy and ensuring public funds are used appropriately and effectively. While it is likely that some tensions will always exist since the late 1980's the relationship between some NSW Department of Education and Training (DET) officials and its teachers has been dysfunctional when compared with the relationship between other education bureaucracies and their teachers. (We draw attention to the fact that we have members in both government and non-government schools),

In relation to Industrial Arts, a major problem emanating from the educational bureaucracy has been the manner in which the Technological and Applied Studies (TAS) Key Learning Area (KLA) has been adopted. This has had a detrimental effect on the delivery of Industrial Arts subjects. Prior to the introduction of the TAS KLA, several NSW universities had strong Industrial Arts teacher education programs; such opportunities are now very limited. This matter is discussed more fully under Term of Reference 3 and in Appendix A.

We also believe that the actions of some universities have adversely impacted on issues relating to this Term of Reference, but these matters are discussed elsewhere in this submission, particularly in relation to Term of Reference 6.

Our experience and anecdotal sources reflect the findings of Ramsey that:

“...schools, employers and universities were disconnected from each other in the provision of initial teacher education and ongoing professional development.”¹

These factors have contributed to lower teacher morale, which manifests itself in the external environment and presents teaching as an unattractive career choice, particularly as the DET is the major employer of teachers in NSW.

Teaching competes with many other categories of employment. Anecdotal accounts suggest that the following are likely to be factors that influence people taking up teaching as an occupation:

- Interest in / attraction to the work of a teacher, and working with children.
- Level of salary and salary increase over time.
- Potential job satisfaction.
- Job security / tenure.
- Desire to help others.
- Influence and circumstances of family members.
- Experiences and success at school.
- Possibility of promotion / career advancement.
- Perceptions of likely alignment in values and support from employer.

Often these factors are based on feelings, perceptions, and comparisons with other occupations. It is a personal achievement to have studied at university and to have qualified as a teacher. It would, as in other graduate and professional employment situations, be expected that the employer would be organised and interested in the individual's appointment, professional development, and be supportive of the individual's career. The attraction to teaching and retention of teachers involves more than just offering someone an opportunity to practice his or her vocation through an offer of employment, the payment of a salary and the award of a medallion at the end of a lifetime of service. Earlier approaches to recruitment, induction, development and support did include a high level of nurturing and commitment by DET, plus

¹ Dr Gregor Ramsey's report, *Quality Matters* <https://www.det.nsw.edu.au/teachrev/welcome.htm> viewed on January 9 2005

an expectation and some predictability in regard to appointments, promotion and transfers. These seem to have dissipated in recent years.

Knowledge of these, and other factors, associated with the administrative structure of the Curriculum in secondary education and teacher training; particularly in Industrial Arts, could be a disincentive to recruitment.

We offer the following comments on the contemporary context that may need to be addressed or considered in regard to attracting the best people to teaching.

- Salaries and salary structures need to be commensurate with other professional occupations that require a university degree.
- Opportunities for career development need to be viewed favourably against other professional occupations that require a university degree.
- Training and development must be readily available and fully supported by the employer. Over the past 10 years this aspect of teaching has been severely reduced. Professional input into the nature and methods of teacher in-service training and development is now largely controlled by DET officials (many of whom have had little or no recent professional experience as teachers) and politically imposed agendas. The nature, location and resource allocation to training and development fails to compare with other industries. Very few teachers, other than principals, ever get the opportunity to attend conferences or regularly meet with colleagues doing similar work in other locations during working hours. How does this compare with engineers, accountants, and other professionals?
- Physical facilities that many teachers have to endure do not compare with other professionals. Teachers often work in poorly maintained buildings, cramped staffroom accommodation with almost no air-conditioning. In Industrial Arts rooms used for working with wood, few schools have dust extraction. In Industrial Arts, since the mid-1980's, the building codes have reduced the quality of the space and facilities in new buildings rather than improving on them.
- The continuing burden of a HECS debt and no allowance mitigate against some quality career change aspirants. Many teachers reaching retirement age entered teaching via a system of scholarships, which covered fees and paid a living allowance.

- Teachers who have low morale or who are experiencing difficulties are unlikely to promote teaching as a desirable career choice to their family, friends or students.
- Teachers in secondary disciplines are unlikely to promote teacher education programs of which they have no knowledge. Many Industrial Arts teachers remember a time when Industrial Arts teachers trained at Sydney CAE, Newcastle CAE and the UNSW were proud of their training programs, actively promoted entry to them and maintained contact with their college lecturers through professional development programs etc. Unfortunately with the abandonment of what may be called Industrial Arts Departments at those universities, this is largely a lost culture. However there is some evidence of this remaining at the Australian Catholic University (ACU).
- ‘Globalisation’ and rapid change are impacting on the wider society. At school young people are told that, unlike the previous generation, they will change jobs frequently and possibly change occupations many times. Teaching as a profession needs to be arranged to suit a variety of occupational patterns - those in it for life, those who enter late, those who move in and out of the profession or those while remaining in the profession, move frequently between states, systems and countries.
- Teaching needs a mechanism whereby people are able to undertake part-time study (often in the evening) to gain professional qualifications. These do not exist at the present time to the best of our knowledge. Many people have entered professions such as law, accountancy, computing and engineering in this way and the reintroduction of part-time evening study options for teachers must be considered.
- Teaching as a profession does not have many associated occupations such as those that exist with, say, medicine – paramedics, nursing, etc. Maybe some consideration needs to be given to para-professional support workers in education, with articulated pathways to full professional status.

TERMS OF REFERENCE 2: the effectiveness and efficiency of current means of recruiting teachers to NSW Public Schools, including

(a) recent graduates

(b) career change teachers

Current methods of recruiting teachers to the profession are limited and often not effectively publicised to the target audiences including: recent school leavers, recent university graduates and those seeking a career change from within and outside teaching.

Every attempt must be made to attract students straight from school at the completion of the HSC. The promotion of teaching as a profession at the school level needs to be expanded. It could well be argued that current school leavers are more exposed to the negative aspects of the teaching profession through the media than they are to the positive aspects that could be emphasised in a strong marketing campaign.

There is a lack of a current clear pathway to follow to become an Industrial Arts teacher. Both 'Teach NSW' and the current UAC Guide fail to delineate a clear pathway to those wishing to become Industrial Arts teachers.

Are the people selected for retraining the best possible for the teaching profession; or are they the best of a selection used merely to fill vacancies quickly? This is also a relevant question when practicing teachers from other teaching methods retrain. Are they the best teachers from that method area or merely teachers experiencing difficulties or trying to be reinstated to the profession? In addition, many professional people undertaking retraining as teachers have not been in a school classroom for a great number of years and have trouble adjusting to the management of today's classrooms.

The impact of the HECS debt is considerable and low pay rates and rate of improvement, being locked into annual increments, make repaying this debt difficult compared to other professions.

Student teachers in Industrial Arts, Home Economics and Computing Studies are required by DET to complete a generic TAS program, with an over-emphasis on Design and Technology. The study of 200 hours of Design and Technology 7-10 has now been replaced by Technology (Mandatory); however most beginning teachers will teach this subject to maybe one class in each of Years 7 and 8. The remainder of their teaching load will have to come from other specific technology subjects such as Industrial Technology, Food Technology, or Computing Studies. These subjects have considerably higher student enrolments than Design and Technology in Stage 5.

The appointment of beginning and retrained teachers appears to be ad hoc. These teachers have expertise in an area of technology teaching; this may be as a Design and Technology/Industrial Arts teacher or a Design and Technology/Computing teacher and will be used to fill any vacancy in a technology area. An example of this is a computing based teacher being asked to teach Industrial Arts subjects with little, if any, formal education in the discipline.

Retraining for career change teachers is expensive unless fully funded and represents some (usually great) degree of upheaval in living standard and family life. The need to be willing to teach anywhere in the State is prohibitive to some retrainees and even recent graduates. This requirement is in some instances watered down to a requirement to nominate a number of regions across the state. Many teachers are lost because of this to the private school system, which allows prospective teachers more flexibility in finding a suitable school; usually involving more choice on their behalf.

TERM OF REFERENCE 3: Differences and similarities between primary and secondary school recruitment needs.

The restructurings of the administration within DET since the late 1980's has seen fundamental changes in how the curriculum is presented and supported, and how standards are achieved. We have referred to this in our discussion on Term of Reference 1.

From a secondary education perspective the natural divisions that exist between subject areas have continued in the curriculum. These divisions reflect the seriousness of treatment required in the specialty of particular disciplines. This reflects the notion of subject integrity which is important in secondary education and particularly within Industrial Arts subjects.

Such a pattern would seem to be in alignment with some of the points made in a report launched at the 1998 MACQT Conference *Professional Standards: Quality Teaching*², which, in part, claimed that effective teachers:

- *have mastery of the content and discourse of the discipline(s) from which the subjects (or curriculum areas) they teach are derived,*
- *manage the classroom and other teaching sites in exemplary ways; and*
- *are accomplished in assessing and reporting the learning outcomes of their students.*

The important issue here is that previous systems of curriculum support and administrative support, professional development and teacher accreditation recognised and aligned with this idea of teaching disciplines and subject integrity. Currently existing in schools there are sufficient numbers of teachers (some in leadership positions) with cultural memories of this system, who developed practices and expectations on which the system operated. Unfortunately, structures since the late 1980's and current administrative structures that are aimed at supporting the curriculum and the development of teachers in secondary education, particularly in Industrial Arts, are seen as less than adequate by comparison, and not offering improvements to that which previously existed. We suspect that this is not an issue in primary education.

Previously (eg during the 1970's and 1980's) in secondary education teachers had access to a range of support personnel within their specific areas of the curriculum. There existed consultants, committees,

² <https://www.det.nsw.edu.au/research/completedprojects/ptsnswh.htm> January 9 2005.

and subject Inspectors who were constantly interacting with practising teachers and a close relationship with those in tertiary institutions within the Industrial Arts discipline. These processes, relationships, formal and informal infrastructures and networks, and the culture they developed provided the means by which standards were established, communicated, monitored and further developed, and in which schools delivered quality of education. These support mechanisms no longer exist, or exist at significantly reduced levels. We again draw attention to Ramsey's finding speaking of the current situation.

*"schools, employers and universities were disconnected from each other in the provision of initial teacher education and ongoing professional development."*³

In this respect the SIC could look at the application of the current structure for the delivery of the curriculum in secondary education; KLA's and the application of this categorisation to teacher training requirements. There are anomalies between KLA's, which work to the disadvantage of the Industrial Arts discipline within the TAS KLA. The categorisation factors within the TAS KLA have long been opposed and resented by Industrial Arts teachers along with the application of this categorisation to teacher training and accreditation. *(Please see Appendix A for an expansion of these matters)*

Further, beginning teachers in secondary schools need to be supported by people who have expertise both in generic skills and in the skills and content of their discipline. It is acknowledged that DET has some programs in place but these are not well managed or thought through. They tend to be inconsistent and under-resourced. Perhaps beginning teachers should not have the same teaching load as other teachers and a suitable within school mentor having both discipline and generic skills should be given a period allocation and allowance to mentor each beginning teacher. Also that beginning teachers be placed in schools which can provide such support and development opportunities. To place a beginning Industrial Arts teacher in a remote central school in which he/she may be the only IA teacher or in which another staff member is a recent graduate and in which support and appropriate mentoring is not possible, should no longer be an option in the staffing operation.

There is a need for ongoing and meaningful dialogue between the DET and its teachers through their professional associations and at the school level. The fundamental aim should be to develop a functional relationship between teachers and the organisation, which can withstand times of stress. These processes

³ Dr Gregor Ramsey's report, *Quality Matters* <https://www.det.nsw.edu.au/teachrev/welcome.htm> viewed on January 9 2005

need to be inclusive and not limited to those who are aligned with the thinking of DET officials. This has been a particular problem for Industrial Arts teachers in secondary education.

TERM OF REFERENCE 4: existing initiatives and programs of the Department of Education and Training, including

(a) Teach NSW

(b) scholarships for undergraduates.

Few of our members offered comment on Teach NSW. Some indicated that they knew of the program, others claimed little or no knowledge of the program. No one claimed to be in a position to be able to comment on the effectiveness or otherwise of this program. This in itself says something about how effectively this program has been communicated and the processes used in its development.

However examining material contained in the Teach NSW package and on the DET's website under Teach NSW⁴ we find that there is a considerable amount of information that may be of use to someone already committed to entering teaching. It does not, in our opinion, do much to motivate the just interested or curious. The material also reflects the pattern we have criticised in our discussion of the TAS KLA under Term of Reference 3 and in Appendix A. TAS is mentioned frequently in this material with no reference to Industrial Arts other than in retraining courses; yet the discrete disciplines in the CA KLA are mentioned.⁵ We wonder if this is related to an oversupply of Visual Arts teachers; many of whom, in order to become employed as teachers, undertake retraining programs. We can find no reference to Industrial Arts teaching in the material directed to undergraduate entry; yet there is reference to Industrial Arts retraining programs.

A rhetorical question jumps to mind: "does DET only want to attract teachers already trained in other disciplines to retrain as Industrial Arts at a considerable cost to DET but discourage school leavers and others to enter Industrial Arts teaching via normal undergraduate programs which are funded by normal university funding arrangements"? We suspect that the answer is "No"; but one could argue the alternative by examining the material produced in the Teach NSW package and website.

Scholarships for undergraduates

⁴ <https://www.det.nsw.edu.au/employment/teachnsw/index.htm> viewed 30 January 2005

⁵ <https://www.det.nsw.edu.au/employment/teachnsw/teacherqual.htm> Viewed 3 February 03.

Many of our members strongly support the provision of scholarships that cover fees and pay some form of living allowance. However it is recognised that these may need to be refined to take into account current funding arrangements such as HECS and AUSTUDY. We understand HECS fees and a yearly allowance of \$1500 are paid to undergraduate scholarship holders in particular disciplines. We support this initiative, but are not aware of how many potential Industrial Art teachers have been awarded such scholarships. Perhaps DET should attempt to gain the support of professional associations in supporting this program and to encourage school leavers to apply.

We note that a living allowance and fees are paid to those undertaking retraining programs. However the accelerated teaching programs attract the payment of HECS fees but do not provide a living allowance. A number of potential accelerated trainee applicants may not qualify for AUSTUDY; this would be a disincentive.

An additional incentive to recruitment and retention might be an offer to pay teachers the annual HECS debt repayment whilst they remain employed with the DET.

A further incentive to aid retention and promote further development would be to offer to pay HECS fees for existing teachers who undertake appropriate postgraduate study.

TERM OF REFERENCE 5: the role of the NSW Institute of Teachers and its accreditation and endorsement requirements

The need for ongoing and meaningful dialogue between teachers through their professional associations and at a local level with the aim of developing a functional relationship between teachers and the bureaucracy teacher training personal and institutions and systems be put in place to ensure this perhaps.

The subject of this dialogue could include

- Adequacy of current teacher training programs in particular disciplines
- Accreditation of teacher training programs in particular disciplines and facilities available
- Professional development and further formal educational opportunities for teachers
- Research into improving teaching practice and sharing knowledge of interstate and international developments

The NSW Institute of Teachers should:

- work in close liaison with the relevant professional associations,
- provide explicit details of what it means to be an Industrial Arts teacher,
- specify minimum standard for teaching Industrial Arts and specify minimum amount of workshop practice/competency to be attained,
- specify minimum time for OHS training. Safety Certificates,
- challenge current accreditation practices in DET (teach, for example a single woodwork class for two years, be endorsed by the Principal - have no IA skills or knowledge- yet gain accreditation to teach IA subjects).

Further, any guidelines about to what it takes to become an Industrial Arts teacher and the duties of an Industrial Arts teacher should be made in consultation with current Industrial Arts teachers from a wide demographic field including varying ages, teaching experience levels, training levels and also include bodies recognised by Industrial Arts teachers

TERM OF REFERENCE 6: the role, distribution and effectiveness of university pre-service teacher education

The fundamental outcome of a teacher education program should be confident, knowledgeable and competent beginning teachers. In secondary education this confidence, knowledge and competence must include a significant emphasis on and mastery of a subject discipline, e.g. Industrial Arts, Visual Arts, Mathematics, etc.

A report launched by the former Minister for Education and Training (John Aquilina) presented at the 1998 MACQT Conference *Professional Standards: Quality Teaching*⁶ (previously mentioned) claimed in part, effective teachers:

- *have mastery of the content and discourse of the discipline(s) from which the subjects (or curriculum areas) they teach are derived,*
- *manage the classroom and other teaching sites in exemplary ways; and*
- *are accomplished in assessing and reporting the learning outcomes of their students.*

These points reflect the notion of “Subject Integrity” which is particularly important in secondary education.

The concept of Subject Integrity need not conflict with basic and generic skills (eg literacy, numeracy problem solving, planning) or the notion of integration and transfer of knowledge and skills across disciplines and contexts. Holistic qualities are also identified in The MACQT Conference report *Professional Standards: Quality Teaching*⁷, which also points out effective teachers:

- *are committed to their students and their holistic development,*
- *are reflective practitioners and embody the qualities of the educated person and exemplary citizen; and*
- *are leaders of learning communities.*

⁶ <https://www.det.nsw.edu.au/research/completedprojects/ptsnswh.htm> January 9 2005.

⁷ <https://www.det.nsw.edu.au/research/completedprojects/ptsnswh.htm> January 9 2005.

We believe that the specialist discipline based components of secondary teacher education programs must clearly reflect the subject integrity of the particular discipline and subjects within them. We believe that there has been pressure to dilute the strength of subject integrity in teacher education programs for potential Industrial Arts teachers since the implementation of “*Excellence and Equity*”. More recently we have become concerned about the less than transparent processes of teacher education program accreditation, with criteria developed within DET, then implemented by the NSW Teacher Qualifications Advisory Panel (TQAP) without reference to relevant professional teacher associations. We suggest that the present accreditation criteria be reviewed in conjunction with professional teacher associations, DET and representatives of other system employers. In particular, there needs to be recognition that the traditional disciplines present within the TAS KLA also comprise discrete areas that are a part of the subjects Design and Technology, and Technology (Mandatory). This means that a person qualified to teach Design and Technology, and Technology (Mandatory) may not necessarily be competent to teach some of the other TAS KLA subjects, such as Engineering Studies, Food Technology and/or Computing Studies

The basic model for a four-year undergraduate degree to educate Industrial Arts teachers could take a number of forms, but must ensure the points made earlier are addressed. The models could be:

1. An integrated Bachelor of Education in Industrial Arts. A number of our colleagues would support the title of the degree to be a Bachelor of Education (Industrial Technologies) or a Bachelor of Education (Engineering and Technology).
2. A Bachelor of Industrial Technologies with a Diploma in Education.
3. An alternative model could be a Bachelor of Education degree with a common first year program for all prospective teachers. This year would then be followed by three years of courses tailored to the specialty discipline and generic courses adapted to primary or secondary education requirements where necessary. This gives undergraduates the opportunity to consider what teaching discipline they really wish to follow. It may also encourage graduates from other disciplines into teaching who may be studying first year programs such as psychology, sociology, etc. Practicum experiences could be arranged in the first year in both primary and secondary schools. This would provide students with the opportunity to decide if teaching is really their preference.

There also needs to be a provision for teachers who have completed the Industrial Arts teacher re-training program to obtain an Industrial Arts major, or equivalent, by part-time study. This was once available for two- and three-year trained teachers through the old ASTC, Dip. I.A. Ed., at Sydney Technical College and the three-year to four-year trained conversion programs at both Sydney and Newcastle CAEs. Prior to the 1980s a number of teachers in other disciplines obtained accreditation as Industrial Arts teachers through these programs.

We have long sought the provision of Industrial Arts teaching degree programs at both Sydney and non-Sydney based universities. Industrial Arts discipline subjects at universities should be conducted by mainly fulltime academics with Industrial Arts qualifications and recognisable expertise. The specialist Industrial Arts facilities should be of a high standard and available to students for non-timetabled access. It should be noted that such facilities did exist at Newcastle and Sydney CAEs, but have since been downgraded or abolished after these institutions were forced to amalgamate with local universities under the Dawkins reforms.

We have also sought the establishment of flexible delivery teacher education programs, which can be completed through part-time study or via distance education (with some practical workshop components). This would provide a mechanism for non-teachers, as well as teachers, in remote areas to complete Industrial Arts teacher education studies without having to undertake full time study.

Industrial Arts teachers regret the abandonment of the undergraduate Industrial Arts teacher education programs at the universities of Sydney, NSW and Newcastle. The replacement program at Newcastle, in our view, does not meet the same standards that were achieved by the previous program in our opinion. Unfortunately the replacement program at the University of Sydney is less satisfactory. Programs have been established at Charles Sturt University and at Southern Cross University. In our opinion, these programs have potential but unfortunately have not met the quality of the earlier programs.

We have been unable to obtain any information on the program running at the University of Western Sydney other than that available in the UAC handbook. The lecturers and co-ordinators of this program have had no contact with Industrial Arts teacher associations.

The Australian Catholic University is the only Sydney based university providing a teacher education program that has some of the Industrial Arts features that we would endorse, but it runs on a small scale.

Industrial Arts teachers have been pleased that some lecturers from the Australian Catholic University program have regularly engaged in dialogue with Industrial Arts teachers with a view to developing their program to meet the needs of curriculum delivery that exists in schools. However it should be noted that most of the Australian Catholic University graduates do not seek employment with the government sector.

Industrial Arts professional associations look towards formal and informal dialogue with universities with a view to improving the program structure and content to meet the needs of curriculum delivery that actually exists in schools and to re-establish the symbiotic relationship that existed between school based Industrial Arts teachers and those delivering Industrial Arts teacher education programs in universities. We assert that there is a need to appoint additional full-time, tenured academics qualified in the Industrial Arts discipline in universities to deliver Industrial Arts programs. This is necessary to reduce the present over reliance on casual lecturers, which currently pervades the sector. We are opposed to the contract system of employment of lecturers adopted by the University of Sydney to deliver DET funded Industrial Arts teacher re-training programs. We believe that there is not a critical mass of Industrial Arts academics to provide the research, development and promote information exchange, dialogue and professional leadership

One of the significant problems universities have to manage within teacher education programs in general is the quality and quantity of the teaching practicum. A significant problem here is that the universities do not seem to have access to financial resources to adequately fund supervised practicums. The practicum is a significant experience for introducing student teachers to the reality of the classroom, and building and developing their expertise as confident and competent teachers. An alternative approach could also include the mentoring concept where experienced classroom teachers guide and support beginning teachers during the formative phase of their teaching career. This could be a mechanism for reducing the burden on university finances.

The majority of Industrial Arts teachers view the DET's focus on retraining teachers from other disciplines as a 'quick fix' solution. To a lesser extent the accelerated training of people from professional and trade backgrounds is similarly viewed. The very nature of the delivery of these programs, with the emphasis on completion in as short a time as possible, leaves little time for any study of subject areas suitable for teachers of Engineering Studies. At best these students are able to gain a reasonable

knowledge of Design and Technology and one of the main focus areas of the TAS KLA: this could be a basic grounding in one area of Home Economics, Computing Studies or Industrial Arts.

Engineering Studies is seen as the pinnacle of Industrial Arts subjects and ranks as one of the higher order subjects offered for the Higher School Certificate. Industrial Arts teachers regard the continuation of teacher education programs such as those listed above as detrimental to the prospects of Engineering Studies being a viable subject in the curriculum. Any Industrial Arts teacher education program must include long-term study in Engineering Studies.

Should these short-term approaches to Industrial Arts teacher education continue, opportunities must be provided for these teachers to gain access to professional learning, which will enable them to develop broader skills and knowledge, including the ability to confidently teach Engineering Studies to students.

TERM OF REFERENCE 7: Any other matter arising from these terms of reference

Occupational Health and Safety (OHS)

A number of our members have raised issues related to what was traditionally called “safety” or safe working practices and now called Occupational Health and Safety (OHS). Many concerns relate to the adequacy of the skill and knowledge base of teachers emerging from some teacher education/retraining programs to meet these requirements. Anecdotal accounts suggest that there have been a disproportionate number of serious accidents in classes being taught by teachers trained via the retraining programs. We have been unable to obtain any data from DET in relation to this and stress that the information is anecdotal.

There are also anecdotal accounts that school students are discouraged from taking up Industrial Arts teaching when they become aware of the personal responsibilities, including the possibilities of heavy personal fines that Industrial Arts teachers have to accept in relation to OHS. Primary teaching and other secondary disciplines become far more attractive in contrast.

Exhibitions of outstanding student work

The Board of Studies conducts a number of exhibitions/displays, which promote the achievements of students. In TAS the Board of Studies (BOS) conducts the DesignTech display for HSC Design and Technology works. Specifically, Industrial Arts subjects such as Industrial Technology are excluded. In Creative Arts (CA) the BOS conducts Art Express for Visual Arts and Encore for Drama and Music. The BOS provide resources in the form of an Exhibitions Co-ordinator, considerable time and money to organise and seek out exhibition space. Yet again evidence of the support of individual disciplines within the CA KLA as opposed to the more generic and we would argue damaging, approach in the TAS KLA. Student involvement and the publicity and prestige accorded these CA displays provide a positive orientation to these disciplines.

Industrial Arts teachers, without any support from DET or BOS conduct an exhibition of outstanding Industrial Technology students’ projects in conjunction with the very well attended Working With Wood Show in June each year at Fox Studios. This exhibition is possible only due to the generous donation of space by the Working With Wood Show promoter and is fully funded otherwise by the IIATE. Student work is submitted from across the State and the exhibition attracts many very highly favourable comments.

Last year an informal suggestion was made to an officer in DET's Personnel Directorate to the effect that this would be an excellent place (captive audience) to promote Industrial Arts teacher education programs. While the informal response was to the effect that it sounded like a good idea and they would look into it, we have had no further contact in regard to this suggestion. The approach had to be informal at this stage as the Industrial Arts teachers professional association is given the space free of charge (it meets all other costs) to display Industrial Technology projects.

APPENDIX A

KEY LEARNING AREAS (KLAs)

Secondary teachers, unlike primary teachers, study particular disciplines. Secondary schools are also expected to provide learning experiences and “content rigour” that will enable students to move from school into further discipline based education, training and work. However, secondary schools are still expected to build on basic skills and develop a range of knowledge and skills that will enable young people to function in and adapt to an increasingly complex world that they will enter as citizens, students and workers. In the last two years of secondary school a number of students are already engaged in employment and learning in TAFE colleges. Some students, however, are clearly focused on particular professional options and University programs and have selected subjects in Stage 6 accordingly.

The Qualification Requirements for Classification as a Primary School Teacher and the Qualification Requirements for the Senior Years of Schooling in the NSW Department of Education and Training⁸ reflect these differences, but there is a need to examine some aspects of these requirements as they impact on Industrial Arts teachers and Industrial Arts teacher education.

Within the secondary sector in NSW, Industrial Arts as a discipline was adversely affected by the implementation of the “*Schools Renewal*” and “*Excellence and Equity*” initiatives of the late 1980’s and early 1990’s. As a consequence of these initiatives there were inappropriate changes to Industrial Arts teacher education programs.

The processes and outcomes of the McGaw Report “*Shaping Their Future*” and the Government’s White Paper on reforms for the HSC “*Securing Their Future*” were widely supported by Industrial Arts teachers; in particular the abolition of the curriculum Key Learning Area (KLA) categorisation of subjects in Stage 6. In discussing aspects of Professor McGaw’s process Dr Jim McMorrow claimed.

⁸ <https://www.det.nsw.edu.au/employment/recruit/index.htm> viewed on 9 January 2005

“The reform process has produced a strong information base for underpinning decisions. It has been an open process; informed but not captured by interest groups. It has been characterised by consultation, investigation, reflection and where necessary, further investigation”.⁹

We endorse McMorrow’s comments but would add they could not be made about the processes that led to the establishment of KLA’s in “*Excellence and Equity*” mentioned above. But the McGaw initiatives applied only to the final two years of secondary education. KLA’s remain in other years and the Technological and Applied Studies (TAS) KLA nomenclature has been, and continues to be, applied in sometimes inappropriate and damaging ways elsewhere; particularly in relation to Industrial Arts.

It is interesting to examine the way in which the TAS KLA nomenclature has been applied when contrasted with other KLAs.

- Many KLAs; English, Mathematics, and Science (for example) contain subjects that are seen to be from the same discipline or very closely related disciplines.
- Within some other KLAs there are subjects from separate disciplines. A good example of this is the Creative Arts (CA), which contains Visual Arts, Music and Drama. We are unable to locate any attempt to see teachers from these separate disciplines as CA teachers or teacher education programs as CA degrees. This is further reinforced in the “Undergraduate Degree Requirements For Teaching In NSW Public Schools”¹⁰ of the TeachNSW website. No mention of the CA KLA is made: the separate disciplines of Visual Arts, Drama, Music, and Dance are listed as discrete areas.
- In the Human Society and its Environment (HSIE) KLA, the various disciplines within it are seen as separate; e.g. History, Economics/Commerce and Geography.
- Within the TAS KLA there has been pressure to deconstruct natural disciplines within the KLA (e.g. Industrial Arts and Home Economics) and replace them with the more generic TAS designation.

⁹ Dr Jim McMorrow. WHO’S DRIVING THE SCHOOL BUS? Address to the Australian College of Education NSW Chapter Conference convened by the North Harbour Regional Group 1 May 1998 <http://www.austcolled.com.au/state.php?id=305> viewed 9 January 2005

¹⁰ <https://www.det.nsw.edu.au/employment/teachnsw/teacherqual.htm> viewed 3 February 2005

The damaging misapplication of the TAS KLA nomenclature for Industrial Arts exists in DET Policy regarding teacher education given expression in TeachNSW¹¹ and more strongly in DET's Qualification Requirements for the Senior Years of Schooling in the NSW Department of Education and Training.¹² To illustrate this we provide the following contrast between the requirements for the TAS KLA¹³ with that of the HSIE KLA.¹⁴

Method 1 for teacher accreditation of this policy provides for the

*"Completion of appropriate university studies endorsed by the Department of Education and Training for employment purposes."*¹⁵

Within the HSIE KLA the history example states:

*"Completion of a Bachelor of Education (history) through a higher education institution will qualify a teacher to teach history."*¹⁶

A further example for the HSIE KLA is given which recognises subject integrity.

Yet within Method 1 for the TAS KLA, central importance is given to TAS and Design and Technology. There is no reference to Industrial Arts or other disciplines that in fact were assigned to the TAS KLA. This requirement, as it relates to Design and Technology, is now out of date given the introduction of the revised Stage 4 - 5 syllabuses in 2005.

Further, the issue of an "underlying philosophy" is raised within the TAS KLA in section 2.

*"The TAS KLA contains a diversity of subjects which are united by an underlying philosophy."*¹⁷

¹¹ <https://www.det.nsw.edu.au/employment/teachnsw/index.htm> viewed 30 January 2005

¹² <https://www.det.nsw.edu.au/employment/recruit/index.htm> viewed 9 January 2003

¹³ <https://www.det.nsw.edu.au/employment/recruit/index.htm> Page 3 Method 1 Example 1. Viewed on 9 January 2005

¹⁴ <https://www.det.nsw.edu.au/employment/recruit/index.htm> Page 8 Method 1 Example 1. Viewed on 9 January 2005

¹⁵ <https://www.det.nsw.edu.au/employment/recruit/index.htm> Page 2 Method 1 Example 1. Viewed on 9 January 2005

¹⁶ <https://www.det.nsw.edu.au/employment/recruit/index.htm> Page 8 Method 1 Example 1. Viewed on 9 January 2005

¹⁷ <https://www.det.nsw.edu.au/employment/recruit/index.htm> Section 2.1 Page 3 viewed January 9 2006

There is no claim of an underling philosophy in the sections dealing with other KLAs, but the claimed “*underlying philosophy*” within the TAS KLA remains unstated and does not cite any authoritative source for such a claim.

Industrial Arts teachers reject that a consensus position exists on the nature or acceptance of any “*underlying philosophy*” amongst practitioners within the so-called TAS KLA. We agree that there is a diversity of subjects, and some common methodology but a number of them fit neatly within the Industrial Arts discipline; others do not and have little similarity in terms of knowledge, skills, materials, and processes, etc. to Industrial Arts subjects.

We believe this is an indicator of an attempt to undermine subject integrity and eliminate, by a process of deconstruction and reconstruction, the traditional disciplines that were lodged within the TAS KLA. This process was not carried out in other KLA’s, but has been very damaging to:

- Industrial Arts teacher self concept and morale,
- the content and availability of Industrial Arts Teacher education programs,
- the number of full-time university staff employed to deliver Industrial Arts related programs in teacher education institutes and the consequent diminution of research, development and professional dialogue emanating from universities in Industrial Arts education,
- the number of school leavers who may have considered becoming Industrial Arts teachers through information supplied by DET in teacher recruitment, e.g. TeachNSW¹⁸ and to university personnel conducting undergraduate teacher training programs in Industrial Arts; and
- meeting the valid demand for subject integrity and rigour in subject content in secondary education within the Industrial Arts discipline.

We believe pressure to misapply the TAS KLA nomenclature still emanates from within DET and in the advice that DET provides to teacher education institutions. Industrial Arts teachers have resisted this and, where we have been able to have direct input, we have been able to argue the case for Industrial Arts discipline type programs e.g. in the DET funded retraining programs.

Further the once close and symbiotic relationship between classroom Industrial Arts teachers and tertiary lecturers engaged in Industrial Arts teacher training now only exists in isolated pockets. A similar breakdown is also apparent with universities and elsewhere in relation to ongoing professional development for existing teachers in the area of Industrial Arts.

Our experience and anecdotal sources reflect the findings of Ramsey's that

*"schools, employers and universities were disconnected from each other in the provision of initial teacher education and ongoing professional development."*¹⁹

We believe the inappropriate application of the TAS KLA nomenclature and disconnection, mentioned above identified by Ramsey, are adversely impacting on the morale and functioning of IA teachers, the promotion and selection of IA teaching as a career choice and the quality of teacher training program within the secondary education sector. We see no evidence of DET officials recognising this let alone addressing these issues.

¹⁸ <https://www.det.nsw.edu.au/employment/teachnsw/index.htm> viewed 30 January 2005

¹⁹ Dr Gregor Ramsey's report, *Quality Matters* <https://www.det.nsw.edu.au/teachrev/welcome.htm> viewed on January 9 2005

APPENDIX B

A PHILOSOPHY OF INDUSTRIAL ARTS

In the very broadest terms Industrial Arts Technology Education embodies the totality of the interrelationship between people and their material environment in a technological sense. In this respect it is clearly defined as being separate and different to but not divorced from interrelationships between people and their material environment in a scientific, cultural or commercial sense.

Whilst industrial arts technology education has its own body of knowledge it also seeks to draw from the sciences and social sciences, to provide a basis of understanding of the nature of materials, the ways in which they may be modified, the skills and techniques used in' applying them. Industrial Arts Technology Education also seeks to place technology within a social context by examining the ways in which peoples' lifestyles have been modified by the application of various technologies.

Within education, at the tertiary level, Industrial Arts Technology Education is reflected in the faculties of architecture, engineering and the applied sciences. Within TAFE it is reflected in the multitude of trade programs. Within primary and secondary education it finds expression in programs variously titled craft, science and technology, design and technology, technical studies, and industrial arts.

As well as developing the cognitive domain through a knowledge and understanding of materials and processes, a study within Industrial Arts Technology Education benefits a person through,

- a) helping them to understand and interpret the technological and industrial world in which we live,
- b) providing a basis for fine motor skill development through the manipulation of tools and equipment under a design, make, evaluate paradigm,
- c) developing beneficial attitudes towards safety, design, creativity, quality organisation, and co-operation, the environment; and
- d) developing a conceptual framework and an appreciation of spatial interrelationships.

RECOMMENDATIONS

1) Take action to improve the inappropriate application of the Technological and Applied Studies (TAS) Key Learning Area (KLA) as it applies to curriculum, management, professional development and teacher education programs.

- a) The KLA concept in Stages 4 and 5 of secondary education should be abandoned, as it has been for Stage 6. However, as a minimum we strongly recommend that the anomalies between KLAs, which work to the disadvantage of the Industrial Arts discipline within the TAS KLA be corrected. The disciplines within the TAS KLA should be recognised as separate entities as they are with the disciplines within other KLAs such as Creative Arts (CA). This should also be carried through into DET structures, procedures, policy and advice given by DET to schools, universities, etc.
- b) The present Industrial Arts/TAS teacher education accreditation criteria should be reviewed in conjunction with professional teacher associations, DET and representatives of other system employers.
- c) DET staffing recognise that a person may be qualified to teach Design and Technology, and Technology (Mandatory); however, they may not necessarily be competent to teach other Industrial Arts subjects which schools may require. This may also apply to subjects in other disciplines within the TAS KLA.

2) Take action to improve the relationship between Education systems (particularly DET) teachers, and the political process.

- a) Establish a system/network for genuine consultation, feedback and input with school-based teachers through their teacher associations. In the case of Industrial Arts this would include the involvement of: The Institute of Industrial Arts Technology Education and the NSW Industrial Arts State Equipment Committee.
- b) Take action to ensure that teachers' salaries and working conditions are commensurate with those of people in commerce and industry whose professional education and experiences parallel those of teachers. This is particularly necessary for teachers beyond eight years of service.

- c) Take action to ensure that strong, viable, ongoing and accessible professional development programs are developed and implemented for teachers. Teachers should have an integral role in the planning and implementation of these programs. This would enable teachers to maintain and expand their knowledge/expertise base and ensure that they are always at the forefront of knowledge and skills in their discipline.

3) Action to improve TeachNSW, teacher recruitment programs and scholarships for undergraduates

- a) Adjust promotional material aimed at encouraging undergraduate entry to teacher education by specifying disciplines e.g. Industrial Arts rather than the generic TAS or Design and Technology focus that currently exists.
- b) DET should gain the support of professional teacher associations to actively encourage their teacher members to promote teaching as a career choice to school students.
- c) We strongly support the provision of scholarships that cover fees and pay some form of allowance in excess of the current amount.
- d) An additional incentive to recruitment and retention might be an offer to reimburse teachers their annual HECS debt repayment whilst they remain employed with the DET.
- e) A further incentive to aid retention and promote further professional learning would be to offer to pay the fees for existing teachers who undertake appropriate postgraduate study.
- f) The DET utilise exhibitions of outstanding student work to promote teaching as a career choice and also provide financial and logistical support for exhibitions within the Industrial Arts discipline such as InTech.

4) Take action to improve the staffing and provision of Industrial Arts Departments in universities

- a) Establish formal arrangements whereby Industrial Arts professional teacher associations have direct input into improving teacher education programs.

- b) Establish a critical mass of academics by the appointment of additional full-time, tenured Industrial Arts lecturers in universities to deliver Industrial Arts discipline courses, provide research, development, information exchange, dialogue and professional leadership.
- c) Ensure that high standard specialised Industrial Arts facilities exist in all universities delivering Industrial Arts teacher education programs. Students must have access to these facilities during non-formal contact times, in a way that they have access to library and computer facilities in other university programs.

5) Industrial Arts teacher education

- a) The fundamental outcome of a teacher education program should be graduates who are appropriately confident, knowledgeable and competent beginning teachers. In secondary education this confidence, knowledge and competence must include a significant emphasis on and mastery of a subject discipline, e.g. Industrial Arts, Visual Arts, Mathematics, etc. The current TAS KLA teacher education program accreditation criteria compromise this outcome for potential Industrial Arts teachers and needs to be corrected in consultation with Industrial Arts teachers and their professional associations.
- b) Teacher education programs, at undergraduate, retraining and professional development levels must also ensure teachers have a skill and knowledge base sufficient to ensure that they are competent and appropriately confident in matters relating to safety generally in school practical classrooms and workplaces and also in the application and conduct of Occupational Health and Safety (OHS) requirements.
- c) Provide Industrial Arts teaching degree programs at both Sydney and non-Sydney based universities.
- d) Establish flexible delivery teacher education programs, which can be completed through part-time study or via distance education (with supervised practical workshop components). This would provide opportunities for non-teachers, as well as teachers, in remote areas to complete Industrial Arts teacher education studies without having to undertake full time study.
- e) Review the accelerated teacher training and the teacher retraining programs for prospective Industrial Arts teachers in consultation with Industrial Arts teacher professional associations.

- f) Provide opportunities for teachers who have completed the Industrial Arts teacher retraining program to obtain an Industrial Arts major, or equivalent, by part-time study.
 - g) Review the membership and consultation processes of the Teacher Qualifications Advisory Panel, or any body that replaces it, to ensure that classroom based practicing teachers' opinions are reflected in its deliberations and decisions. Further that when matters related to secondary based teacher education programs or degrees are being considered, that the relevant subject based teacher professional associations are genuinely involved.
- 6) Take action to improve the support for beginning teachers and procedures to promote retention.**
- a) Beginning teachers should be placed in schools where appropriate support exists.
 - b) Beginning teachers in secondary schools need to be supported by people who have expertise both in generic skills and in the skills and content of their discipline.
 - c) Beginning teachers should not have the same teaching load as other teachers and should have a suitable within school mentor, having both subject specific and generic skills. Mentors should be given a period allocation and financial allowance.
- 7) The NSW Institute of Teachers**
- a) Accreditation and endorsement procedures should encourage active participation of teachers with their professional association at a local level.
 - b) Develop a functional relationship between teachers, educational bureaucracies, teacher education personnel and universities. Issues needing to be addressed include:
 - i) adequacy of current teacher education programs in particular disciplines,
 - ii) accreditation of teacher education programs in particular disciplines and the facilities available,
 - iii) professional development and further formal educational opportunities for teachers; and
 - iv) research into improving teaching practice and sharing knowledge of interstate and international developments.

- c) Professional teacher associations need to be directly involved in the development and delivery of approved professional learning programs; including those required by the Institute of Teachers to maintain teacher accreditation.