

How lists of teacher attributes address emotional skills for healthy teacher professionals

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Emotional intelligence (EI) appears an attractive construct for viewing psychological health of teacher professionals and their resilience in managing complex relationships. Although issues of teacher stress and coping can be linked to emotional competencies, research on the development of these competencies in teachers is in its infancy. A survey of undergraduate teacher education students examined a measure of emotional competencies. However, factor analysis did not support proposed EI subscales. This paper considers, through list content analysis and comparison, how emotional competencies are embedded within current listings of attributes of effective teacher graduates. Future teacher education needs to consider emotional competencies.

In building psychological health for teacher professionals and in increasing teacher resilience in managing complex relationships, the broad notion of emotional intelligence (EI) appears attractive. The companion notion of EI trainability has been applied in business settings and, in education, to student performance (Zeidner, Matthews, Roberts & McCann, 2003). Although issues of teacher stress and coping have been linked in various ways to emotional competencies (Manuel, 2003; Richardson & Shupe, 2003; Zembylas, 2004), research on the development of these competencies in teachers is in its infancy. However, various lists of attributes of effective teachers have set standards for professional practice and, in various ways, have shown some recognition of the relevance of personal skills among healthy attributes.

Lists with different sources, languages, and purposes have played a role in current efforts to reconceptualise a 4-year undergraduate program. Program reviewers, however, can encounter great difficulties in reconciling multiple list perspectives and reaching consensus on a path to redesign that includes personal skills among healthy attributes. In education and other professions, a list of quality practice indicators is a basic tool that can be used to drive the process of defining and describing, measuring and auditing, and changing and implementing practice (American Psychological Association, 2002). A list may address either macroprofessional issues of accountability, accreditation, and registration or microprofessional issues of reflection on practice, program reform, and path to implementation. When more than one list provides sets of descriptive statements about teacher attributes, then the task of deconstructing lists into their key constituent features and of determining how to incorporate new emotional attributes makes an important contribution to conducting a coherent and sustainable reform process.

Undergraduate program innovation in teacher education

University curriculum programs for teachers have, through cycles of review and reform, progressively incorporated advances in educational research. Each new graduate of a program then contributes new capacities to advance educational reform and school effectiveness. Academic innovations across the curriculum have been the focus of teacher education in recent times. However, future teacher graduates must be able to build social competencies in the classroom and prevent difficult social relationships from interfering with student learning (Perry, Ball & Stacey, 2004). Future teacher graduates also need to participate as social contributors to sustainable improvement and capacity building across their educational system. These teachers will need psychoeducational skills that address the major socioemotional challenges to learning effectiveness in our public school system (Antidote, 2003; Elias, Arnold & Hussey, 2003; Greenberg et al., 2003).

Elias, Zins, Graczyk, and Weissberg (2003) have argued that social-emotional competencies must be nurtured in teachers, because “human operators” are critical to psychoeducational innovations in practice. In order to implement successful research-based reforms in practice, Elias, Zins, et al. (2003) identified four areas for change: attributes of the teachers who must carry out planned reforms, difficulties in management of resources and time, continuation of narrow and decontextualised teaching traditions, and persistent structural weaknesses in educational settings. Review of preservice training and preparation of teachers and their ongoing support in school systems needs to help teachers “develop the necessary attitudes and skills to carry out their responsibilities successfully” (Elias, Zins, et al., 2003, p. 314).

Emergent needs of contemporary teacher professionals must be accommodated in program redesign of university teacher education. The process of educational research into program effectiveness should be reflective, investigatory, and developmental (Evans, 2002). More often, program redesign resembles an intuitive, experiential, and self-indulgent process to which different participants bring competing ideas (Winch, 2002). Fashions that achieve dominance in one review are replaced in the next: One design team biases the program their way, and the next design team does it some other way. A primary program at Griffith University is currently under review. This program already prepares competent teacher professionals who are valued in the Queensland educational industry across various indicators (e.g., employability and career satisfaction). However, the team of reviewers has discovered that reviewing is a complex process, because the profession, the industry, the university, and the research literature provide many perspectives on the attributes of a healthy teacher graduate.

Multiple lists of teacher attributes

The importance of personal skills has been recognised across professional, industrial, academic, and scientific perspectives on teacher performance in Queensland. These types of lists articulate a desire to address issues of personal effectiveness as a critical contributor to life and career success over and above graduate status and professional registration. These lists have evolved generally through consultation with a range of

educationalists, and sometimes with wider stakeholders, and then periodically through general review processes. However, these lists are descriptive and lack validation. Given the emerging tendency to make personal attributes an issue in teacher practice, these lists need to be tested against current views of emotion as a relationship construct and of emotional development as a biopsychological system. Table 1 provides summary listings of four kinds of lists of teacher attributes, with the first two columns focused on standards of teacher practice and the second two columns focused on undergraduate skill development.

Table 1. A comparison of lists of attributes of teacher education students

Professional	Industrial	Academic	Scientific
BTR Standards	EQ Standards	Griffith University Domains of Capability	Emotional Competence Inventory
Graduates will possess and be able to apply professional and disciplinary knowledge bases.	Structure flexible and innovative learning experiences for individuals and groups.	Learning and adaptability Problem solving	Self-awareness
Graduates will possess and be able to apply a range of literacies relevant to their professional roles.	Contribute to language, literacy and numeracy development. Integrate information and communication technologies to enhance student learning. Assess and report on student learning.	Written communication Oral communication Information literacy Interpersonal skills Self-management Personal effectiveness	Self-assurance Self-awareness
Graduates will exhibit the skills to create supportive and intellectually challenging learning environments to engage all learners.	Create safe and supportive learning environments. Construct intellectually challenging learning experiences. Construct inclusive and participatory learning experiences. Support the social development and participation of young people.	Learning and adaptability Problem solving Conceptual and analytical skill	Flexibility
Graduates will understand and participate in relationships that characterise ethical professional practice within and beyond learning communities.	Construct relevant learning experiences that connect with the world beyond school. Build relationships with the wider community. Contribute to professional teams.	Community and citizenship Career and vocational Organisational membership Team and group skills	Authenticity
Graduates will be committed to reflective practice and ongoing professional renewal.	Commit to professional practice.	Professional effectiveness Self-management Personal effectiveness	Self-regulation Personal Insight Accountability

The professional standards specified by the Board of Teacher Registration (BTR) in Queensland in August 2002 require personal skills to be able to provide support for learning and to participate in ethical relationships, in addition to professional disciplinary requirements and academic requirements. This list (see summary in Table 1, column 1) was primarily designed to assist universities engaged in teacher education by defining attributes considered necessary for effective beginning teachers. The Board reviewed their guidelines and consulted widely to ensure an “innovative and flexible approach.” This recent updating to reflect emerging trends and issues in

education, for example, raised the profile of teacher technological competence among its multiliteracies but did not specifically address emotional literacies (Antidote, 2003). This list is used as an integral component in guiding the program consultation and acceptance process of teacher education programs. It also purports to provide a model for attempts to develop national teacher education guidelines, for credentialing, certification, and professional development.

Education Queensland (EQ), the major employer of teachers in Queensland, has also developed professional standards for teachers that provide guidelines for professional practice. According to this industry sector, these generic standards (see summary in Table 1, column 2) provide definition and reference for the work of teachers in achieving future education planning outcomes. They also provide a platform for reflection on professional practice and showcase professional skills and priorities within a framework aligned to key systemic initiatives of EQ. In partnership with the Queensland Teachers Union, EQ recognised the need to ensure that these standards accurately reflect the current knowledge, skills, and abilities of effective teachers in Queensland. A pilot study (Mayer, Mitchell, MacDonald, Land & Luke, 2003) used a multimethod approach to investigate and report on the capacity of the standards to encourage reflection on more contemporary and responsive teaching practices. Although these professional standards were affirmed and were perceived to provide an authentic framework for reflection of teacher practices, it would seem that specific standards were not actively challenged as part of this process.

Tertiary education bodies and scientific researchers have also developed lists of standard skills for potential incorporation into program design. At Griffith University, a generic skills model has been articulated for teachers and for all other tertiary students (see summary in Table 1, column 3). These generic skills include the development of personal as well as academic and related professional skills. The capacity to function more effectively, flexibly, and adaptively over time in a changing environment has defined this university's approach. Graduate characteristics include personal skills such as interpersonal skills, team and group skills, and self-management, in addition to academically focused skills in oral and written communication, conceptual and analytical skills, problem solving, and information literacy. Initially, a tiered hierarchy of skills, the Resource Pyramid of "building blocks" to personal and professional effectiveness, was constructed to provide a visual representation of the development of skills within the person (bottom level), skills in acting upon the environment (second level), and skills in working within societal systems (third level) that contributed to the personal and professional effectiveness of the Griffith graduate.

In university audits of generic skill development in 2000 and 2003, however, the generic skills were operationalised as a wider range of specific attributes (Crebert, Patrick, Ingram, Davies & Parker, 2003; Crebert, Peach, Miller, van Haering, Bakharia & Abbott, 2000). Audit results, moreover, indicated an ongoing emphasis on academic skills such as written communication, problem solving, and critical evaluation. That is, the results showed that academic skills were well embedded in programs (i.e., 50-70%). Embedding criteria involved priority in the program, use in teaching, practice opportunities, and assessment. Between the 2000 and 2003 audits of

university programs including teacher education, upwards revisions were observed in some specific personal attributes, such as leadership, ethics, and lifelong learning, and teamwork increased from 30% to 50% in all programs. However, it was found that development of personal generic skills over the course of an academic program was not well documented. These results suggested that these skills were an administrative requirement of the university rather than an integral part of tertiary teaching and learning practice.

In a further extension of the generic skills project, it was argued that students could use a “capability profile” as a self-awareness tool to improve their study skills and future graduate employability. A survey of self-assessed strengths and weakness was constructed with separate scales derived from the original 14 building blocks in the Griffith Graduate pyramid of generic skills. It was posted to the university website (http://www.gu.edu.au/centre/gihe/griffith_graduate/). Use of this survey by students of psychology, management, and environmental engineering indicated that, after self-assessment of a skill, students were motivated to develop the skill when they could frame skill relevance in terms of self-identity and employment (Lizzio & Wilson, 2004). Development of these skill capacities appears to rely on self-regulation and self-responsibility, two central emotional competencies.

Several lists of aspects of emotional intelligence have been constructed from various theories of self-skills and relationship skills. A widely acceptable definition of emotional intelligence (EI) is that it is “the ability to monitor one’s own and others’ emotions, to discriminate among them and to use the information to guide one’s thinking and actions” (Salovey & Mayer, 1990, p. 189). Goleman (1998) defined an emotional competence as a “learned capability based on emotional intelligence that results in outstanding performance at work” (p. 24). Goleman (2001) proposed that competencies associated with EI relate to the ability to recognise emotion and regulate emotion in self and others. A definition that integrates the work of Goleman (1995, 1998) and Boyatzis (1982) is that EI is observed when a person demonstrates the competencies that constitute self-awareness, self-management, social awareness, and social skills at appropriate times and ways in sufficient frequency to be effective in the situation.

This range of interpersonal skills and competencies seems to be essential for teachers to manage the broad range of professional roles and responsibilities, and self-management skills seem to be essential to cope with these demands. Teacher educators, therefore, need to better understand the development of these intrapersonal (self-management and self-regulation) and interpersonal (other-management and other-regulation) skills before, during, and after the process of completing an undergraduate course of study. Negotiation and cross-validation of the meaning and integration of these four types of lists from the teacher registration sector, employment sector, university sector, and scientific sector is a focus for design of teacher education programs.

Methodology

This study provided a content analysis of items in each of the four lists (see Table 2). The analyses sought to clarify list descriptors. The four lists were prepared for text analysis by the software package, Leximancer (Smith, 2002), which generates a nonselective exploration of samples of text. Leximancer computes the frequency with which each term is used, after discarding text items of no research relevance (such as “a” and “the”), and then computes the distance between each of the terms via computations equivalent to nonparametric factor analytic or cluster analytic procedures. As with other factor analytic procedures, there is no single solution, and the quality of particular solutions are judged in terms of their interpretability. The results of computations are displayed in two-dimensional spatial representation that can be explored through rotation to optimise the arrangement of terms and to explore the family of associations with any one term. The clusters of terms in each of the four quadrants can be interpreted as forming patterns of associations. The clusters derived from analysis of each list were then compared for evidence of interconnectness of attributes.

Table 2. A comparison of content analyses of attributes of teacher education students

Professional	Industrial	Academic	Scientific
BTR Standards	EQ Standards	Griffith University Domains of Capability	Emotional Competence Inventory
<i>Teachers and learning</i>	<i>Standards and requirements of graduates</i>	<i>Understanding ways and groups; and understand people and disciplines</i>	<i>Relationships and values related to competent behaviour and to feelings and emotions</i>
Level of proficiency	Analyse and formulate learning	Confidence in understanding and identifying a range of information	Identifying feelings and emotions
Teacher environment	Make life connections with the world	Understand people, ideas, trends, and issues	Emotional based Authenticity
Design context	Design and construct the environment that meets student requirements	Understand ways or approaches, discipline, and work implications.	Acting and behaviour in relationships
Graduates learning to be teachers	Solve problems ; have opinions	Professional evaluation; and Understanding work groups and situations	Capable with values and relationships

Note. Font variations show major dimensions identified from content analyses of each of the four lists in italics and specific constructs from the content analysis in bold.

With respect to emotional skills, this study also reported some data on the instrument measuring emotional competencies that was content-analysed. A survey of undergraduate primary teacher education students ($n = 109$) examined the factor structure of a 43-item measure of emotional competencies based on two intrapersonal dimensions of the Goleman and Boyatzis model of emotional intelligence (Dann, 2001). The two proposed subscales purported to measure self-awareness (with three sets of items dealing with emotional self-recognition, personal insight, and self-

assurance) and self-control (with four sets of items on emotional self-management, authenticity, accountability, and flexibility). Factor analysis by principal axes addressed three issues about the nature of the content of this inventory: Was the matrix of inventory items able to produce a factor structure; Was the resulting structure simple with multiple single-factor item loadings; and Was it possible to interpret the factors in a meaningful way?

Data and analysis

Table 2 presents summaries of the organising terms within each of the four quadrants for each of the four lists. Although it was possible to “line up” each of the four quadrants to represent similar constructs, variations between the content of each list required some forcing to obtain a matching of clusters across lists to achieve comparability.

Factor analysis of the Emotional Competence Inventory showed that the matrix of items was factorable after 26 items were removed for positive skew and factor overlap over several iterations. The resulting factor structure was simple, with two or more items loading onto seven factors with eigenvalues greater than 1.0. The factor structure could be said to be interpretable, but, for five of the seven factors, the 16 items with strong loadings on these factors did not derive from item sets as described by Dann (2001). Therefore, construction of emotional competencies scales also needs validation to ensure that the proposed nature of individual differences is justified.

Research outcomes

The first observation from these findings is the “fit” between these descriptive lists. The organising characteristics of the lists reflect their different origins. For example, a professional focus on teaching and learning becomes industry focus on “real-life world”; an academic focus on understanding persons and professions becomes a scientific focus on relationships. The results indicate that such listings are primitive and fuzzy conceptualisations that need further scientific investigation. The teacher education review process, however, tends to rely on these lists to ensure registration and employability.

The factor data on the Emotional Competencies Inventory shows that the apparent face validity of sets of attributes must be tested (see Perry, et al., 2004), because the actual patterns of individual differences may have different meanings from those proposed. Further investigation of different inventories, and how they apply to students in teacher education programs and to best practice guidelines for teachers’ emotional competencies, also needs to take place.

Conclusion: Implications for further research

The construction of a viable measure of interpersonal and intrapersonal competencies for the professional training of teachers will have implications for measuring the development of teacher education students as they move through their undergraduate program. Although multiliteracies are identified across lists of attributes in curriculum

development, there seems to be a need to include emotional literacies within this concept. More generally, there is an argument for including emotional competencies in undergraduate teacher education programs to ensure substantive weighting of the development of these competencies compared with curricular and professional competencies. In this event, reviews and further design of teacher education programs may need to actively consider how to provide learning opportunities to raise awareness of emotional competencies and deficits as part of healthy attributes in practice listings and how to train teacher education students to develop emotional competencies in line with a more clearly defined and integrated set of professional skills, university attributes, and teacher registration goals.

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