Changing perceptions of preservice teachers: innovations in middle schooling teacher education

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Abstract
For the past twenty years, the disengagement of early adolescents has been the focus of much of the literature related to middle schooling. In response, some universities in Australia have introduced teacher education programs that focus upon graduating specialised middle schooling teachers. Constructing such programs is at the centre of much debate and discussion, however, it is advocated that positive futures for early adolescents can be enhanced through quality middle schooling teacher education programs (Education Queensland, 2004). At a Queensland university campus, middle schooling elective units were introduced as part of the Bachelor of Education (primary) degree. The design of the units was to support preservice teachers to gain the theoretical and pedagogical knowledge to engage and promote early adolescent learning. An innovative approach to the delivery of the units was promoted by a partnership agreement between local schools and the campus. The partnership allowed preservice teachers to combine university classes with opportunities to visit exemplary classrooms to observe, participate and reflect upon middle school teaching practices. The aim of this study was to explore and describe the 38 first-year preservice teachers’ perceptions of their first middle schooling elective unit and to ascertain whether the combination of university classes and school-based experiences assisted their development of middle schooling concepts and approaches. Data were gathered using pre-test and post-test questionnaires combined with guided written reflections to record their views before, after and during the unit delivery. Results indicated that initially 34 preservice teachers had little understanding of middle schooling concepts and pedagogical practices, however, 11 participants recognised that bullying and peer pressure were issues experienced by early adolescents. The collation of the written reflections supported the combined delivery of the middle years unit further supporting the inclusion of school experiences with university delivered units.

Keywords: middle school, preservice teacher

The middle years of schooling focuses on early adolescents, that is young people from approximately 10 to 15 years of age (Barratt, 1998; Braggett, 1997; Manning & Bucher, 2005). In Queensland Australia, the middle years of schooling or middle phase of learning is
noted to include the schooling years from grades 4 to 9 (Education Queensland, 2004). During these years, early adolescents undergo major life changes that include the transition from primary school to secondary school and the transition from childhood to young adulthood. Over this period, early adolescents experience development faster than at any other time in their lives except infancy (Carnegie Council on Adolescent Development, 1996; Swaim, 2004). During early adolescence, diversity between students is at its greatest as young people mature physically, socially, emotionally, intellectually and morally at different rates and at different times (Lounsbury, 2004). The impact of simultaneous physical, emotional, intellectual and social factors as young people move through the early adolescent years, creates needs and challenges for this age group that are significantly different from the needs of younger children or older adolescents (Education Queensland, 2004).

In addition to the changes young people experience, the world in which they live has undergone profound changes over the last few decades. Accordingly, the kinds of skill sets and knowledge that early adolescents will need as they leave school are increasingly different from those that traditional education systems have delivered in the past (Carrington, 2006). Concurrently, profound changes in society mean that middle years students are engaging with diverse cultures and technologies within a far more complex and uncertain world outside school (Carrington, 2006; Education Queensland, 2004). Early adolescents bring to the classroom skills and abilities resulting from their immersion within new social, cultural and technological landscapes. Many adolescents engage with new media, embrace new technologies (Prensky, 2005/6), popular culture and manipulate texts across a range of genres and modes (Carrington, 2004). Thus, there may be a mismatch between the skill sets and knowledge of adolescents and traditional classroom practices.

Recent studies have shown that early adolescent students are making the least progress in learning and the gap between low and high achievers increases markedly over this phase of learning (Education Queensland, 2004; Lingard, Ladwig, & Mills, 2001). Early adolescence has also been identified as the peak time, significant for some students, for behavioural problems, depression and the onset of substance abuse (Fuller, McGraw, & Goodyear, 2002). At this time, significant numbers of early adolescent students experience underachievement, lack of enjoyment and increased disengagement and alienation from school (Carrington, 2006; Zbar, 1999). For other early adolescents, the middle years of schooling can be a watershed. It is a time when their work at school calls for more sophisticated skills and greater engagement with abstract knowledge. As early adolescence is considered to be a turning point in the life development of young people (Roeser et al., 2001), these years provide a particular challenge for teachers to prevent or to reverse the processes underlying the alienation and disengagement experienced by many of these students.

Departments of Education in Australia recognise the need to address and support early adolescent development. Middle years policies and action plans have emerged from state Education Departments such as Queensland (Middle Phase of Learning State School Action Plan, 2004), New South Wales (Our Middle Years Learners – Engaged, Resilient, Successful,
2006) and Victoria (Strategy for Reforming the Middle Years in Victorian State Schools, 2003). These guides do not suggest that schools move to introduce separate middle schools, but embed middle years practices within the existing two-tiered schooling system (i.e., primary and secondary). Middle years’ policies highlight the importance of school reform, strategies to engage middle years learners and, of particular interest to this study, the suggestion that education institutions need to prepare beginning teachers to teach in the middle phase of learning (Education Queensland, 2004). By graduating teachers equipped with the knowledge, skills and practices to engage and motivate middle phase learners, it is envisaged that the disengagement and “at risk” behaviour (Carrington, 2007) often displayed by adolescents will be minimised by developmentally aware and supportive teachers.

There is a shared vision within government reports (see Top of the Class Report, 2007) and the literature that individual teachers contribute more substantially to changes in student achievement than other factors such as school influences, gender or background characteristics (Hattie, 2003, 2005; Osterman, 2000; Rowe, 2000). Reviews about quality teaching also show that teaching is the most important factor for changing students’ educational outcomes (Nelson, 2002), which includes middle years education (Knipe & Johnstone, 2007). Characteristics such as warmth, enthusiasm, optimism, flexibility and spontaneity along with classroom practices that include knowledge of subject matter, use of a wide repertoire of pedagogic strategies and the ability to monitor student learning have been identified as requisite to effective teachers in the middle years of schooling (Forte & Schurr, 1997). Furthermore, middle school teachers must be knowledgeable about the learning needs and characteristics of their early adolescent student cohort (Carrington, 2006) and of middle years educational contexts. Groundwater-Smith, Mitchell, and Mockler (2007) state that “understanding can be deepened through building specific knowledge of students’ contexts and cultures, examining our assumptions about difference and critically analysing the often taken-for-granted values in schools and classrooms” (p. XXX).

Given the importance of the teacher for engaging early adolescents in the classroom and their overall impact on student achievement, teacher education programs must empower graduating teachers with an understanding of early adolescent development and the relevant pedagogies for teaching and learning. Indeed, there have been proposals for reforms in the middle years of schooling and it is often considered that if change is to occur, it is best done at the preservice teacher education level. Over the past decade some universities in Australia have implemented education degrees that produce specialised middle years teachers; however these programs have struggled for survival in a two-tiered primary/secondary schooling system. Yet, early adolescent education in schools continues to be viewed as an area of concern, with teachers considered as the catalyst that can make the difference.

Context
This investigation is set at a regional campus of a Queensland university in Australia. As a way to address departmental policies (see Education Queensland, 2004) and the need to graduate teachers who are ready to engage middle phase learners, preservice teachers at this campus undertake studies in the middle years of learning. This is with the view that graduates
who specialise in middle years teacher education have the potential to be vehicles of reform (Jackson & Davis, 2000). Preservice teachers at this campus complete four middle years elective units within their Bachelor of Education (primary) degree. The electives include: Middle years students and schools; Middle years curriculum, pedagogy and assessment; Teaching strategies for engaging middle years learners; and, Teaching students with learning difficulties. Preservice teachers undertaking this degree complete the first of these electives (i.e., Middle years students and schools) in semester two of their first-year of study. In keeping with the strategic plan for this campus, unit coordinators “incorporate community engagement activities into the academic programs of the campus” (Caboolture Campus Strategic Plan 2008-2012, p. 3). Hence, preservice teachers complete the unit content and commence school visits in middle years classrooms so the links between middle schooling concepts and practices can occur concurrently. Exemplary teachers nominated by their principals host the preservice teachers for the three whole day in-school visits that are guided with information disseminated to preservice teachers and classroom teachers, who act as mentors. This allows for a shared understanding of the purpose and goal of the visits. The guided visits are closely linked to the content of the elective so the preservice teachers can make the links to their observations and activities experienced within the school setting. At the conclusion of the school visits, preservice teachers are involved in a debrief session to discuss their experiences and comment on the middle years practices and pedagogies observed. The first-year middle years unit is underpinned by current middle schooling educational trends and research. It has been designed to introduce the preservice teachers to early adolescence and middle schooling. The unit consists of the following topics:

- What is early adolescence and middle schooling?
- New adolescents, new times - The influences upon early adolescents
- Middle years philosophy – What is it?
- A whole school approach to middle schooling
- Adolescence - A psychological perspective
- Adolescence - A physiological and neurological perspectives
- Adolescence - A socio-cultural perspective
- Behaviour management approaches in the middle years of schooling
- Middle years curriculum and pedagogy
- The issues of transition

The aim of this study was to explore and describe first-year preservice teachers’ perceptions of middle schooling at the conclusion of their first year of tertiary education.

**Data collection methods and analysis**

This study employed qualitative methods of data collection as the study was concerned with the participants’ perspective (Cohen, Manion, & Morrison, 2007). Case study design was used for this investigation as it consisted of one group of first-year preservice teachers who were treated as a single entity and were “representative of a target population” (Hittleman & Simon, 2006, p. 153). Thirty-eight first-year preservice teachers completed a pretest, posttest questionnaire and during their middle years classroom visits, wrote reflections that were guided by a prepared outline that was discussed prior to the commencement of the visits. These first-year preservice teachers were aged between 18 and 39 years and completed the pretest questionnaire in week one of semester two before commencing the elective unit.
“Middle years students and schools” and later in the last week of their second semester. Anonymous questionnaires aimed to provide an account of the preservice teachers’ perceptions of middle schooling before and after they completed the elective unit. Furthermore, the guided reflections would document the participants’ in-school experiences and demonstrate the preservice teachers’ ability to identify middle years practices within the school context. Participants were directed to use pseudonyms in their reflections to protect their identities. By de-identifying the preservice teachers, the schools and the staff, the participants could write freely and honestly, allowing for a more honest and accurate response (Kervin, Vialle, Herrington, & Okely, 2006).

Pre and posttest questionnaires were analysed by comparing and contrasting the responses before and after the completion of the unit. The responses were coded to note emerging themes, which assisted the analysis (Cohen et al., 2007). Guided reflections were also coded for themes and analysed on the relevant middle years practices identified during the in-school visits. These were compared to the content of the unit, the readings and the relevant text. Data gathered from the questionnaires and the guided reflections were then collated to provide an overall view of the preservice teachers’ perception of middle schooling.

### Results and discussion

Preservice teachers were asked to note what they believed to be the middle years of learning. Responses indicated that the preservice teachers had little knowledge of the middle years with thirty-four participants providing a variety of answers such as “grades 3-10”, “grades 3 – 9” and “senior primary”. Four preservice teachers indicated that the middle years of learning were from grades “4 – 9”, however, there was no indication that particular grade levels were relevant to different states in Australia or, more importantly, that the middle years of learning were aligned to early adolescent development.

The preservice teachers showed an awareness of the issues concerning early adolescents prior to the commencement of the unit. Table 1 below depicts the responses and the response rates in rank order. As can be seen, there is variety in the participants’ responses, however, peer pressure and bullying at school were the most frequent responses with 11 preservice teachers recording that these were areas of concern. This response rate may be due to the influence of media reports, the participants’ experiences or as parents of early adolescent children.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Number of participant responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer pressure</td>
<td>11</td>
</tr>
<tr>
<td>Violence and bullying</td>
<td>11</td>
</tr>
<tr>
<td>Onset of puberty</td>
<td>8</td>
</tr>
<tr>
<td>Self esteem</td>
<td>5</td>
</tr>
<tr>
<td>The influence of the family</td>
<td>5</td>
</tr>
<tr>
<td>Disengagement from school</td>
<td>5</td>
</tr>
<tr>
<td>The influence of the media</td>
<td>4</td>
</tr>
<tr>
<td>Risky behaviour</td>
<td>4</td>
</tr>
</tbody>
</table>
There were four emerging themes noted by the preservice teachers when asked what they hoped to gain from completing this middle years introductory unit. Analysis of the pretest questionnaires showed that 21 preservice teachers hoped they would gain a greater understanding of middle years students. A typical response was:

I am looking forward to this unit as I don’t know very much about middle schooling so I’m hoping this unit gives me a greater understanding and makes me a better teacher in the future.

Other participants noted they hoped to gain a greater understanding of middle years curriculum \( (n=5) \), a better understanding of how to teach \( (n=4) \) with some participants noting they had “no idea” \( (n=4) \) of what they hoped to gain from the unit, which may relate to their lack of understanding about the nature of middle schooling and early adolescence.

At the conclusion of the unit, the same 36 preservice teachers completed the posttest questionnaire. Collation of the post-test data demonstrated the preservice teachers’ changing perceptions. Participants were again asked what they believed to be the middle years of learning. Thirty two participants noted that it was signified by early adolescence and was a significant period of time in human development. Twenty-seven extended their responses to note that although developmental, in Queensland, Australia the middle years most often included students studying in grades 4 to 9. A typical response noted:

After completing this unit I now recognise that the middle years of learning include students studying in Queensland between the years 4 to 9. More importantly however, these students are undergoing great physical, emotional and psychological changes. It is certainly a significant time of development that, as training teachers, we need to be aware of so we can support early adolescents in our future classrooms.

As part of the posttest, preservice teachers were again asked about the key issues related to early adolescents and middle schooling. This data, gathered after completing the unit, revealed the participants had changing perceptions of middle schooling and the issues concerning early adolescents. Table 2 below shows a greater frequency in preservice teacher responses across a broader range of issues. Furthermore, the issues noted were more detailed in their description.

<table>
<thead>
<tr>
<th>Sexual conduct</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not sure</td>
<td>2</td>
</tr>
<tr>
<td>Drugs</td>
<td>2</td>
</tr>
<tr>
<td>Alcohol consumption</td>
<td>2</td>
</tr>
<tr>
<td>Healthy eating</td>
<td>1</td>
</tr>
<tr>
<td>Financial stress</td>
<td>1</td>
</tr>
<tr>
<td>Enjoyment in life</td>
<td>1</td>
</tr>
<tr>
<td>The development of identity</td>
<td>1</td>
</tr>
<tr>
<td>Academic development</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 2: Post-test: Participant responses regarding the issues concerning early adolescents

<table>
<thead>
<tr>
<th>Issue</th>
<th>Number of participant responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>


The onset of puberty 28
Teachers need to consider teaching strategies to engage early adolescent learners 28
It is a time of physical, emotional, intellectual and social change 24
Schools need to take a whole school approach for teaching early adolescents 22
Schools need to be aware of the needs of early adolescents 22
It is a significant time of development 21
There are significant socio-cultural influences 17
Learning needs to be linked to their world 15
Early adolescents can become easily bored if activities are not relevant 15
They are developing their identity 14
Many will require support as they make the transition from class to class and to the secondary school setting 13
School pressures can affect their behaviour and attitude towards school 12
Early adolescent development needs to be considered in the classroom and at school 12
The brain is undergoing changes 10
Family influence can decrease during adolescence 10
They can be susceptible to drugs 9
Possible disengagement at school 9
The influence of peers can increase 8
Bullying can increase 8
They can be prone to risk-taking 2
It is important to monitor their health and well being 2

As can be seen by comparing tables 1 and 2, an increase in the variety of responses demonstrated the preservice teachers gained a broader understanding of early adolescence, the issues they face and, the role of schools and teachers in supporting their development. The number of responses was greatest about understanding adolescent development with issues such as the risk taking, nature of early adolescents, and the importance of monitoring health and well-being noted twice only. This low response rate may be due to the preservice teachers perceiving these two points were covered by previously mentioned issues (i.e., early adolescent development and the role of the school in supporting middle school students). Of consideration for teaching this unit in the future, is that key issues indicating low level response rates would need further follow-up and opportunities for deeper learning.

Further study of the pretest and posttest data outlined in tables 1 and 2, showed that the number of preservice teachers indicating bullying as an issue for early adolescence, decreased after the completion of the unit. The majority of preservice teachers recognised the number of issues related to early adolescent development and saw this as an integral part of the responses “Schools need to be aware of the needs of early adolescents” and “Schools need to be aware of the needs of early adolescents” of which there were 22 responses respectively.
The analysis of the reflections from the school visits demonstrated the preservice teachers’ abilities to make the links between the content, middle years literature and their observations of the middle years practices in the school context. Twenty-seven of the preservice teachers commented upon the links between the lectures, tutorials, literature and what they observed in the schools. A representative response was:

Throughout my school visits I found it interesting to see what we have been learning in theory actually put into practice. I kept thinking to myself in lectures and tutorials, “this isn’t the way it would be done in schools” but it actually was.....how surprising! The teacher I had talked to me at length about early adolescence in her classroom and the strategies she uses to keep them engaged.

Other preservice teachers noted the value of the school visits in assisting them to make the links between the content of the unit and the way in which teachers incorporated middle years practices within their classrooms. A reaction that summarised the majority of the group’s responses was:

The school visits have shown me the practical side of the content discussed in the middle year’s unit studied at university and an array of teaching strategies that can be applied in a classroom situation. This valuable insight into middle years teaching will assist my development as a future classroom teacher. I saw first-hand the whole school approach to teaching early adolescents with my teacher incorporating hands-on activities, student centred learning and strategies that incorporated higher order thinking.

Within their reflections the preservice teachers noted a number of middle years practices that aligned with middle years literature and the content of the unit. Table 3 below summarises those observed by the preservice teachers during their school visits.

Table 3: **Middle years practices observed by preservice teachers during their school visits**

<table>
<thead>
<tr>
<th>XXX</th>
<th>YYY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole school approach to behaviour management</td>
<td>High level of student engagement</td>
</tr>
<tr>
<td>Respect for middle years students</td>
<td>Caring and concerned attitude of the teacher</td>
</tr>
<tr>
<td>Deep learning promoted by teacher</td>
<td>Hands-on learning opportunities</td>
</tr>
<tr>
<td>Student-centred learning opportunities</td>
<td>Variety of teaching strategies employed</td>
</tr>
<tr>
<td>Positive attitude towards middle years learners reflected by the teacher</td>
<td>Constructivist approach to teaching and learning</td>
</tr>
<tr>
<td>Opportunities for physical activity to ensure good health and well being of the students</td>
<td>Promotion of a safe learning environment</td>
</tr>
<tr>
<td>High expectations from the teacher in regards to behaviour and learning</td>
<td>Clear expectations from the teacher in regards to behaviour and learning</td>
</tr>
<tr>
<td>Opportunities for interaction between students</td>
<td>Incorporation of ICTs into daily teaching activities</td>
</tr>
<tr>
<td>Learner centred approach to teaching</td>
<td>Negotiation of classroom rules and democratic classroom</td>
</tr>
<tr>
<td>Appropriately sized furniture for the developmental stage of the students</td>
<td>Fun, interactive approached to teaching and learning</td>
</tr>
<tr>
<td>Variety of computer resources to engage the</td>
<td>Range of teaching approaches to provide</td>
</tr>
</tbody>
</table>
students
Consideration of productive pedagogies in planning and lesson implementation
Allowances for individual differences and the variations in development associated with puberty.
Lessons linked to the real world
Authentic assessment
Catering for individual learning needs

interest
Integrated curriculum
Opportunities for higher order thinking
Variety in assessment
Assessment for learning
Differentiated curriculum

As can be seen in Table 3, a significant number of middle years practices were identified by the preservice teachers indicating that preservice teachers were able to apply the knowledge they had gained from the unit to classroom practice. Furthermore, the data collected indicated that the school visits with exemplary middle years teachers allowed the preservice teachers to make note and observe positive middle schooling practices in action.

Finally, as part of the post-test data, preservice teachers were asked to comment upon what they gained from completing the unit. Three themes emerged: (1) a greater understanding of early adolescence, (2) more knowledge of teaching middle years students, and (3) an understanding of the nature of middle schooling, the content of the unit and the related literature. A typical response that summarises the three emerging themes is noted below:

I really didn’t have much knowledge about early adolescence or middle schooling and this unit has been valuable in changing my views. I gained a great deal from the school experiences as they assisted me to make sense of what we were learning at university and see how I could apply it for the classroom. I feel this experience has inspired me to make my classroom an exciting and comfortable place for middle years’ learners.

However, two participants, although noting they gained from the experience, wished they could spend more time in the middle years classrooms, to illustrate:

I gained a lot of information about middle schooling in this unit and the school visits helped me to understand the university content but, I think more time in schools would have consolidated the concepts even more.

Why didn’t we spend more time in schools? I gained so much from those school visits, I think they were invaluable in helping me to become a better teacher for middle years and the lower years.

Conclusion
Concern for early adolescence in Australian schools has been the focus of many reports and investigations over the past 20 years. Although these reports have noted the school structures and pedagogical practices required for engaging middle years learners, concerns still exist over the lack of school engagement and low performance experienced by many early adolescents. New approaches need to be continually explored so that all students have the opportunity to meet their maximum potential at school. Indeed, it is well documented that the classroom teacher can make the difference and this notion is repeated in much of the literature around middle
schooling. It is envisaged that Universities’ graduating specialised middle school teachers, or those with a deep understanding of early adolescence, is a way forward in creating reform. However, universities are under pressure to align graduating teachers to the two tiered education system indicative of Australia.

The program at the centre of this study embeds middle years pedagogies and practices in the electives of a Bachelor of Education (primary) degree. Hence, graduates “fit” the two tiered Australian education system. Through the partnership agreement with the local schools and the community engagement focus of the campus, preservice teachers were able to experience school visits that provided an opportunity for links to be made between the content of the unit studied at university and the practices of exemplary middle schooling teachers. Results indicated that prior to completing the unit preservice teachers had a limited understanding of the key issues related to early adolescence and middle schooling. A comparison of the pre-test, post-test data suggested that the preservice teachers’ experienced changes in their perceptions and understanding of middle schooling and early adolescent development with an increase in the number of key issues recorded across a broader range of topics. Although this does not indicate that these preservice teachers will successfully engage early adolescent learners in their future classrooms, it is a way forward in providing them with a deeper understanding that may influence their future practices.

Preservice teachers in this program also recorded the benefits of making the school visits as part of the middle years unit. Their responses indicated that school visits linked to university studies can assist them to make the links between content studied at university and the practices in the classroom. Indeed, the preservice teachers in this study supported this approach with twenty-seven commenting upon the value of the visits and the opportunity to make the links between the lectures, tutorials, literature and the practices witnessed in the classroom. Groundwater-Smith et al (2009) describe the “fragmentation” of theory and practice, and support the notion that this can be lessened through the “systematic inquiry into, or reflection on, practice”.

From this research, the changing perceptions of the preservice teachers were successful in demonstrating what teacher education programs can do to provide the knowledge and skills necessary to rethink understandings of students in the middle phase. It is important that pre-service teacher education programs acknowledge the need to have our schools, and therefore our teachers “moving from past practices to ones that will take us well into the 21st century” (Groundwater-Smith et al, 2009).

References


