

University of Wollongong

**Research Online**

---

Faculty of Social Sciences - Papers (Archive)

Faculty of Arts, Social Sciences & Humanities

---

2014

## Using the cycle of learning to differentiate for students with diverse needs in primary schools

Amanda A. Webster

*University of Wollongong*, [awebster@uow.edu.au](mailto:awebster@uow.edu.au)

Follow this and additional works at: <https://ro.uow.edu.au/sspapers>



Part of the [Education Commons](#), and the [Social and Behavioral Sciences Commons](#)

---

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: [research-pubs@uow.edu.au](mailto:research-pubs@uow.edu.au)

---

## Using the cycle of learning to differentiate for students with diverse needs in primary schools

### Abstract

Teachers are increasingly required to teach students with diverse needs in today's schools. The aim of the current study was to trial an action-planning and mentoring process based on the Cycle of Learning pedagogical framework to help teachers and school leaders plan and implement effective practices for students with diverse needs in their classrooms. Openended interviews were utilised to evaluate outcomes for students and teachers as a result of their work with mentors and the action-planning process. Participants reported they had more confidence and skills to teach students with diverse needs and students were more engaged.

### Keywords

learning, cycle, schools, students, differentiate, needs, diverse, primary

### Disciplines

Education | Social and Behavioral Sciences

### Publication Details

Webster, A. (2014). Using the cycle of learning to differentiate for students with diverse needs in primary schools. *Special Education Perspectives*, 23 (2), 19-30.

See discussions, stats, and author profiles for this publication at:  
<https://www.researchgate.net/publication/283146945>

# Refereed Conference Papers USING THE CYCLE OF LEARNING TO DIFFERENTIATE FOR STUDENTS WITH DIVERSE NEEDS IN PRIMARY SCHOOLS

Article · January 2014

---

READS

6

1 author:



Amanda Webster

Griffith University

13 PUBLICATIONS 52 CITATIONS

SEE PROFILE

# Refereed Conference Papers

---

## USING THE CYCLE OF LEARNING TO DIFFERENTIATE FOR STUDENTS WITH DIVERSE NEEDS IN PRIMARY SCHOOLS

Amanda Webster, Griffith University

### ABSTRACT

*Teachers are increasingly required to teach students with diverse needs in today's schools. The aim of the current study was to trial an action-planning and mentoring process based on the Cycle of Learning pedagogical framework to help teachers and school leaders plan and implement effective practices for students with diverse needs in their classrooms. Open-ended interviews were utilised to evaluate outcomes for students and teachers as a result of their work with mentors and the action-planning process. Participants reported they had more confidence and skills to teach students with diverse needs and students were more engaged.*

### INTRODUCTION

With the recent development of the Australian National Curriculum and the emphasis on schools to demonstrate outcomes for students against national standards, teachers are feeling an increased pressure to demonstrate outcomes and provide adjustments for students with a wide range of skills and needs. Many teachers are finding the task of supporting students, performing below or above benchmark standards, to be especially challenging (Harris, 2012). Researchers have also suggested that although teachers

are fairly positive about wanting to provide adjustments and differentiated practices, they often feel that doing so is not feasible within current classroom climates (Schumm & Vaughn, 1991; W. Scott & Spencer, 2006). Teachers report they lack the knowledge about specific disabilities, and adjustments and strategies for students with needs in communication, social, or behavior skills (B. J. Scott, Vitale, & Masten, 1998). Studies have also found that teachers often lack an overall framework from which to identify specific strengths and needs and to target specific outcomes for individual students within the context of class instruction (Tomlinson et al., 2003).

Researchers (B. J. Scott et al., 1998) have suggested that lack of teacher training and limited school support are often barriers to teachers' ability to address needs of individual students in inclusive classrooms. Tomlinson (2003) asserts that successful staff development would entail the use of nontraditional formats. Support for teachers from colleagues and school leaders has also been examined as a means to increase teachers' ability to cater for the needs of diverse students. Smit and Humpert (2012) suggest that professional learning communities in which teachers can engage in learning new strategies are central to improvement of teaching

practices for diverse groups of students. Mentoring and coaching programs have also received increasing attention as a means of supporting teachers to develop knowledge and apply skills in classrooms. Recent research has suggested that the use of both mentoring by peers (Carrington & Robinson, 2004) and mentoring by school leaders (Berzina, 2011; Tillman, 2005) has resulted in teachers' improved use of inclusive practices and higher achievement for students with diverse needs.

The *Cycle of Learning* pedagogical framework was constructed from the research on student-centred learning (Bransford, Brown, & Cocking, 1998; Hattie, 2003) and data-based teaching practices (Crosland & Dunlap, 2012). Establishing a comprehensive vision for student learning is at the heart of the process in the *Cycle of Learning* framework. The Melbourne Declaration on Educational Goals for Young Australians

(2008) states that the overall vision for all students is to become 'successful learners, confident and creative individuals and active and informed citizens. In order to help students achieve this goal, teachers must start by assessing the student's current level of readiness, skills, and needs (Tomlinson & Jarvis, 2009). Assessment then enables teachers to identify student's zone of proximal development to identify specific goals and establish clear learning intentions for students (Hattie, 2009; Marzano, 2007). After establishing specific instructional targets, teachers can develop instructional strategies and environmental supports that will enable students to work together and to achieve specific targets within curriculum standards (McTighe & Brown, 2005). Finally effective teachers develop assessment practices that will allow them to engage in both formative and summative assessment and evaluation of student achievement against targeted

Figure 1 Cycle of Learning Pedagogical Framework



Table 1 Participant demographics.

Participant	Grade Level/Position	Years at school
Teacher A	Year 1	1 <sup>st</sup> year teaching
Teacher B	Year 1	18
Teacher C	Year 2	7
Teacher D	Year 2	5
Teacher E	Year 5	10
Mentor 1	School leader for learning support	11
Mentor 2	School Leader for Curriculum	8

goals. This assessment then provides the reflective teacher with a means to engage in consideration of how and what students have learned and serves as a pre-assessment to the next round of goal setting, instruction and evaluation (Moon, 2005). A diagram of the *Cycle of Learning* framework is presented in Figure 1.

This paper will present a research project in which teachers and school leaders, utilised a mentoring process and action-planning model, based on the *Cycle of Learning* pedagogical framework, to target academic and general capability outcomes (ACARA, 2012) for a group of students with diverse needs and plan adjustments to content, instruction, assessment, and environment. The aim of this project was to determine if teachers and mentors could work together and utilise the *Cycle of Learning* framework to translate theory on differentiation and student-centred learning to practice enabling students with diverse needs to increase their learning and engagement.

## METHOD

### Participants

The project took place in an urban primary school in Queensland. The school has an enrolment of approximately 300 students with 12 students verified as having disabilities and an additional six students who speak English as a second language.

Teachers also reported that a number of students (10-15%), consistently performed well above benchmark standards. The school has 25 teachers working in both classroom and support positions. Five teachers volunteered to participate in the project. The two school leaders who acted as mentors in the project were in the positions of School Leader for Learning Support and School Leader for Curriculum. During the course of the project, teacher D had to drop out of the project due to personal issues that required her to be absent from school for a period of time. Details on the participating teachers and mentors are outlined in Table 1.

### Design

The project took place over six months during the second semester of the 2013 school year. Prior to the implementation of the action planning and mentoring process, teachers were interviewed about their students' needs, the current strategies utilised and challenges encountered in meeting students' needs, and desired support and training. These interviews were comprised of 15 open-ended questions.

Teachers and mentors then engaged in a session with the researcher to utilise the action-planning model and *Cycle of Learning* framework to identify specific targets for students and to develop plans

to implement differentiated practices to support students to achieve outcomes in both academic and general capability areas. At the end of the study, interviews were conducted with teachers and mentors to assess the impact of the action-planning model and mentoring process on enabling them to apply the *Cycle of Learning* framework to assess needs of students, and develop differentiated practice to establish goals, and differentiate instruction and assessment. Responses at both pre and post-implementation interviews were analysed to identify perspectives of teachers and mentors as well as on outcomes for both students and for future teaching practice.

### **Action-planning process and model**

Teachers and mentors utilised an action-planning document based on the *Cycle of Learning* framework to guide their discussion and planning. During a one hour session, teachers and mentor identified an issue for a group of students in their class and developed a plan of action to address this issue. Teachers were asked to identify a target group of students who were not progressing as they would like and for whom they wanted assistance and support to enable them to meet student needs. In the first step of the model, teachers were asked to describe the overall needs of the group and to brainstorm blockers that were impeding the students' progress. Teachers were also asked to identify the current steps they were taking to meet the needs of this group.

In the second step of the model, teachers were asked to identify a target goal(s) for the group, and how this might be similar or adjusted from the general objective for the majority of the class. In step 3, mentors and teachers discussed the types of differentiated practices and adjustments they would make to content, instruction, assessment, or environment to ensure student success. In step 4, teachers identified what students would do to demonstrate their learning and achievement of the targeted goal(s)

and how they would use data to evaluate learning in both formative and summative ways. Finally, in step 5, teachers identified what type of support and mentoring they needed to gain the skills and knowledge to put this plan into action. Following planning sessions, mentors supported teachers to implement the plan for the next 14 weeks. The researcher followed up with one visit to classrooms during which teachers and mentors outlined their progress thus far and discussed any issues they were experiencing.

### **Data Analysis**

Using an approach outlined by Boyatzis, transcripts were read through and notes were made to identify frequently discussed topics, words, or phrases. Transcripts were read through a second time and initial codes were developed from common topics across all respondents and questions. A final analysis of transcripts was conducted with responses being sorted and coded by interview question with codes being added or collapsed to reflect key themes in relation to existing theory and the research questions posed in this study.

## **RESULTS**

### **Pre-implementation Interview**

Key themes discussed in pre-implementation interviews included characteristics of students and issues regarding meeting needs of students, current teacher practices for diverse students, and confidence of teachers and needs for support.

#### *Student characteristics and issues*

Participants indicated that students in their class had a wide variety of needs including autism spectrum disorder, social-emotional and behaviour issues, hearing impairment, intellectual impairment, and speech and language disorders. Additionally teachers reported that they had a number of students who were performing well above average or who had been identified as 'gifted learners', and who they felt were currently not being

recognised or supported to achieve their potential. Teachers also reported that they often had difficulty identifying needs of individual students, particularly in the case of students with learning, communication, and social emotional issues.

Teachers' responses regarding issues affecting student learning fell into five areas, which could all be generally classified as missing learning opportunities. For some students this was due to frequently participating in specialist and therapy sessions, which required them to leave class. For other students, however, teachers felt they lacked the readiness to fully benefit from learning and class activities.

So, for me, for this group of children, is getting them to come in that door prepared to learn. It doesn't seem to be too automatic, we're now in August and I'm still doing the same things with them. Once they're in there, they need to be able to be organised, be able to find their stuff (Teacher D).

Teachers also reported that poor comprehension and processing skills affected student achievement and also resulted in lack of engagement of students. Lack of engagement was also cited as an issue for students achieving above benchmark standards for which teachers felt they had to constantly develop motivational strategies to maintain their engagement. Teachers also reported that many of the students in their class lacked problem solving and learning behaviours that would enable them to work through problems without asking for teacher help. Finally teachers mentioned that matching learning content and delivery to student levels and catering for who needed a different pace or level of instruction within the overall context of the class was difficult and often led to students becoming dependent on them for support or disengaging from the lesson entirely as illustrated in the following statement by Teacher C:

He can't focus in a whole classroom

environment, even when the environment's quiet, he just, he needs that one on one to help him, he misses a lot of learning because he can't focus. So having the time to help some of these children, and that's what I do. I tend to give my aid time, any time I get, with the low children rather than with the higher ones, because I feel that, well I need to help the ones that need more support, which is probably not very good (Teacher C).

Teacher A also discussed the difficulty in addressing the needs of students who were struggling with key concepts:

I guess it's also just about my kids who are a little bit at the bottom end of the spectrum, bottom end of the learning, is to keep making sure that I'm supporting those guys. As you know, it's kind of tricky sometimes to give them all the time...If it's something, say if we're working on something and they're not really getting it, they tend to sort of just withdraw....If I don't pick up on that, I could get to the end of the lesson and go over to them and there could be nothing on the page (Teacher A).

#### *Current teacher practice*

Teachers identified areas in which they currently supported students or used differentiated practices in classrooms. Chief among these strategies was attempting to match learning content to student level through development of specific materials and worksheets and altering expectations of the work required (higher or lower) for individual students. Many teachers also mentioned they utilised grouping of students at different levels. Teachers reported they tried to find different ways of assessing student learning by using both formal and informal assessments and relied a great deal on ongoing monitoring to track student's engagement and progress.

The lower end, they mightn't get up to the harder questions at the end, I would, I always give kids a second chance at



stuff, particularly at maths stuff. So I'd always mark it and then get them to come and revisit it, see if they can put the right answer in the second time round which tells me that they are, there's a careless mistake or they've learnt a bit more since they've done the test or they really don't know it. I find that's really effective and the kids seem to appreciate that. They seem to be able to see that they're learning... Their assessment's ongoing almost on a daily basis (Teacher D).

Teachers also discussed ways in which they modified the delivery of instruction through the use of hands-on activities and individual assistance. Several teachers mentioned they felt 1:1 support was important for who were struggling but had difficulties providing this as much as they would like.

Sometimes they need an alternate program. So differentiation means just looking at where they are at with that concept, whether it's Maths, I've got the grade Four group that are bottom in Maths, so for them, I've done pretesting, and while the rest of the class are doing 100's, we're still making sure we've got our basic fractions, which was last year's work. And I've got one or two that are a bit further behind, so, differentiate, same concept, but different activities, a lot more hands on, far more hands on support (M1).

Finally, teachers highlighted ways in which they modified the environment utilising technology when possible, providing visual supports for student such as class schedules, and providing sensory accommodations and sanctuary spaces for students with ASD.

#### *Teacher confidence and support needs*

Questions about 'confidence' of teachers in meeting the needs of students highlighted issues related to aligning learning with curriculum. Teachers were less confident in identifying needs of students, dealing with students in unfamiliar grade levels and disabilities, and supporting students needs in developmental areas such as social

personal, communication, and problem solving skills. Teachers also cited limited training and access to appropriate resources as reasons they lacked confidence. Support for planning and practical training were linked to higher levels of confidence by teachers. School approaches that facilitated collaboration between staff was felt to be helpful in enabling staff to develop critical knowledge for students at different academic levels.

#### **Post-Implementation Interviews**

Post-implementation interviews were conducted to determine if the utilisation of an action-planning model based on the *Cycle of Learning* framework and the support by mentors enabled teachers to target student needs and implement differentiated practice to improve academic and general capability outcomes for students with diverse needs. Teachers responses indicated that overall the implementation of this approach led to: improved outcomes for teachers, students, and improved collaboration and practice through mentoring and support.

#### *Teacher Outcomes.*

Following the implementation of action plans, participants were interviewed about the impact *Cycle of Learning* action-planning model and their work with mentors on increasing their skills and confidence in planning and implementing differentiated practices for students with diverse needs. Overall participants were very positive about the impact the model and process had had on their ability to differentiate for students with diverse needs. Outcomes for participants were characterised in five key areas, which are displayed in Table 3. Participants particularly highlighted that the use of the *Cycle of Learning* model had allowed them to develop new ways of thinking, including reinforcing that differentiation was 'doable'. Participants also reported that they had developed an increased focus on supporting comprehension of students as

Table 3 Impact of Action-planning Model on Teacher Practice

Impact	Respondents
<b>New ways of thinking</b>	5
<ul style="list-style-type: none"> <li>• Differentiation is doable</li> <li>• Focus on comprehension</li> <li>• Gap between comprehension and performance in students</li> <li>• Importance of foundation skills</li> <li>• Understanding the student better</li> </ul>	
<b>Establishing a differentiation planning process or system</b>	4
<ul style="list-style-type: none"> <li>• Identify the target skills of students</li> <li>• Classify students into groups</li> <li>• Create multilevel plans for one concept</li> </ul>	
<b>Effective strategies</b>	4
<ul style="list-style-type: none"> <li>• Assessment</li> <li>• Maximising use of human resources</li> <li>• Scaffoldings</li> <li>• Student mentor</li> </ul>	
<b>Development of tools, resources and process</b>	2
<b>Confidence-building</b>	4

well as an awareness of the gap between the comprehension and performance of students.

We just assume that they've got that skill and they haven't and when you do the pre-test and actually see, there are other children that are performing much better at that and we didn't, and you don't realise it unless you do the pre-assessment and collect the data (M1).

More importantly participants reported the project enabled them to better understand specific skill levels at which students were performing, and to establish instructional targets for individual students or groups of students.

Take a single concept and differentiate it. Look at that and then bring it down to the expectations. Bring it down from there smaller and smaller and smaller down to the single concept in the classroom that

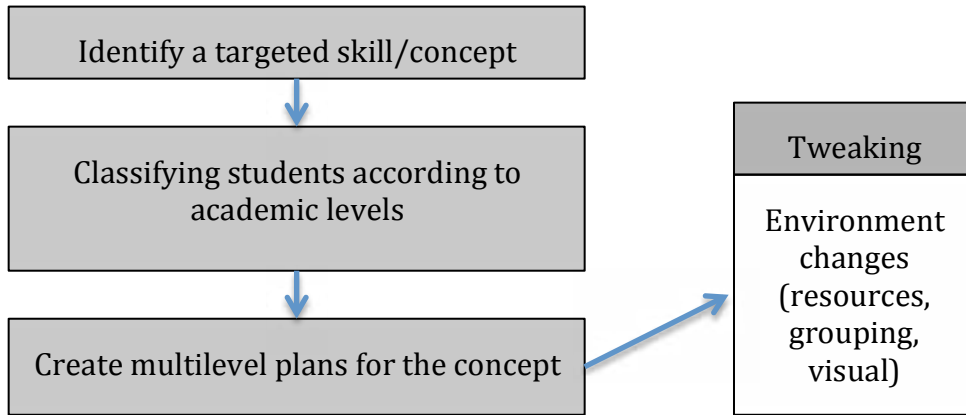
we needed to focus on (M1).

Teachers were also very positive about ways that the model helped them to develop strategies for teaching foundation skills such as problem solving, engagement and comprehension in order to develop students' academic skills.

So our concern was that the students' only way of problem solving, because it was a word problem, was to just come straight up to the teacher and say 'I can't do it' or 'I don't understand what I've got to do'. So M2 and I sat down and thought about ways we can get them to take on more an ownership role of working out what to do before coming to see us (Teacher E).

Participants also discussed ways in which the action-planning process enabled them to establish a differentiation process or system. This is illustrated in Figure 2.

Figure 2 Establishing a Differentiation planning process or system.



In particular, teachers and mentors both reported that establishing a clear target or goal was extremely helpful in enabling them to establish key actions to progress students past previous barriers. By setting targets, teachers were then able to organise and create multilevel lessons that enabled individuals at different academic levels to work together and progress their learning. In addition, teachers really mentioned that target skills they identified were not just academic skills, but were often learning skills and social emotional skills. Teachers also created changes in the environment and instructional prompts to facilitate the learning and achievement of students at different levels. Participants reported they developed more effective strategies for students with diverse needs, particularly scaffolding techniques and better assessment strategies. Two respondents also related they had developed tools and resources that they would use to promote students learning in other areas. All of the participants reported that engaging in the process had enabled them to build their confidence in utilising differentiation and setting specific skills for students.

*Student Outcomes.*

When discussing outcomes for students, participants’ responses fell into three categories: outcomes for students performing at lower academic levels, outcomes for students at high academic levels, and outcomes for the whole class. For students performing below benchmark standards, participants reported that utilising the action-planning process resulted in increased confidence, motivation and engagement of students. Other skills mentioned were building comprehension, and personal social skills such as independence in work and problem solving. Three participants specifically targeted students who were performing well above benchmark standards. Increased motivation, engagement, and confidence were also reported to be the primary outcome for these students. Finally teachers highlighted that utilising differentiated practice in class resulted in additional and more varied learning opportunities for all students in the class.

*Mentoring and Support.*

The third focus of the study was whether mentoring and support for school leaders would result in improvement in teacher’s

confidence and ability to translate theory to practice to apply differentiated processes for their students with diverse needs. All respondents reported that the mentoring process was very helpful in providing them with ideas and assistance with problem solving; This is illustrated by Teacher B who said, 'I'm so glad I did because it's been more one-on-one obviously than just sitting there and having information thrown at you, whereas we got to sit down an plan together.' Participants reported that collaboration with mentors was a key aspect of the support that enabled them to implement new strategies reporting, 'I supposed Teacher A and I have bounced ideas off of each other as well, so teaching partners. And I guess it's good too to have an admin team that is supportive of it as well and the process' (Teacher B). In particular, respondents characterised their collaboration with mentors in three ways: guidance from leaders in the form of co-planning, hands-on support in classrooms including modelling and on-site problem solving, and the benefit of working with others to brainstorm and problem solve.

When asked about future recommendations and needs, respondents mentioned collaboration, co-planning and guidance as key forms of support that would help them to expand their skills into new areas. Similarly, lack of human resources was cited by all participants as one of the key challenges they faced as well as time and organisational issues. Several respondents also mentioned they found it challenging to come up with multilevel programming for one key concept, but that collaboration and mentorship was extremely helpful in enabling them to do this in their classrooms. The school leaders also reported that the process enabled them to develop more specific skills and a structure they could use to mentor and support staff. All staff reported that the process had been particularly invaluable in enabling them to target both academic and social/personal and learning skills although in

pre-interviews teachers reported that they struggled with establishing starting points for students and setting specific targets and goals. Additionally a gap in practice was identified in assessing students above benchmark standards.

## DISCUSSION

Previous research has suggested that teachers feel that catering for the needs of students with disabilities and other diverse needs is important, but is not often achievable (W. Scott & Spencer, 2006). Developing ways to help teachers translate theory to practice to employ differentiated planning and practices in their classrooms is extremely important (Tomlinson et al., 2003) if schools are to realistically include and meet the needs of children with a range of skills and needs. The current study utilised an action-planning model in which teachers and mentors employed an action-planning model based on *Cycle of Learning* framework to identify needs of students and develop achievable plans to address the needs of these students within whole class contexts. Despite the limited time period in which the project was conducted, participants were extremely positive about the impact of the action-planning model and mentoring process on enabling them to identify needs of students, set multilevel goals, implement differentiated instruction, provide environmental supports and utilise data more effectively to evaluate student learning in both academic and personal social areas. In addition, participants reported that the mentoring process was extremely helpful in supporting them to work through issues with students in their classroom.

Before participating in the action-planning and mentoring process, participants reported they primarily used different materials or instructional groupings to cater for the needs of students in their class. This contributed to the teachers' sense of frustration at being unable to organise and manage their time and resources feelings

of confusion about adjusting for the needs of individual students within the context of curriculum standards (Tomlinson, 2005). More importantly, teachers reported they often did not know how to identify needs of specific students. As outlined in the literature on differentiated instruction (Brimijoin, 2005), assessing student's prior knowledge, interest, and readiness is essential to providing appropriate adjustments and differentiated practice for students with diverse needs.

One of the most important reported impacts of the action-planning model was that it enabled teachers to more accurately pinpoint student's current level of performance, and thus to set instructional targets for specific students as well as establish multilevel goals within the class. More importantly participants identified that establishing specific targets helped them to clearly articulate learning intentions, develop opportunities for multilevel learning within whole class activities, and provide specific and ongoing feedback to students about their performance against set goals. Hattie (2009) suggests that establishing clear learning criteria and providing feedback are critical teacher factors that to greater outcomes for students. In addition, when teachers did not establish specific targets for students, they were unable to accurately assess outcomes for students performing above or below benchmark standards. Lawrence-Brown confirms that establishing both enriched and prioritised curriculum is essential to addressing the diverse needs of students in today's schools (Lawrence-Brown, 2004).

The Australian curriculum outlines the importance of addressing not just academic needs of students, but also for addressing critical skills for 21st century learners which enable students to be successful lifelong learners (ACARA, 2012). Finding effective tools and processes that teachers can use to assess needs, set targets and plan actions for students with diverse needs is critical if teachers are to ever

feel confident in supporting all students in their classrooms. Teachers reported that giving them a model they could use to work through the steps of the *Cycle of Learning* enabled them to not just focus on key aspects that were hindering students' progress and targets in academic learning, but to ensure they also addressed student's learning in the general capability areas. Teachers reported that prior to the process, students were experiencing a great deal of issues with general capabilities such as self-management, engagement and problem solving. Use of the *Cycle of Learning* action-planning model allowed teachers to establish instructional plans that targeted academic knowledge and skills while also establishing the importance of simultaneously setting targets for general capabilities such as self-management and problem solving. Both the Melbourne Declaration for the Education of Young Children (2008) and the Australian curriculum stress that addressing both academic and general capability areas are essential if students are to achieve the vision of become successfully learners, confident and creative individuals, and active and informed citizens (ACARA, 2012).

Training for teachers and school leaders is essential for the development of inclusive school communities (Bays & Crockett, 2007; Hoppey & McLeskey, 2010). Mentoring for teachers has been cited as critical to nurture teacher in putting theory into practice in today's complex classrooms (Berzina, 2011; Carrington & Robinson, 2004). Both teachers and mentors reported that the coplanning process and hands-on support enabled them to address problems as they arose, helped them to access a greater range of skills and knowledge, and enabled them to create new processes when needed. The process also allowed school leaders to maximise their work with teachers and to support them in meaningful and practical ways which provides insight into the ways that school leaders can actively engage with teachers in establishing effective

practices for students with diverse needs in schools. Another important finding was that the involvement of school leaders in the mentoring process enabled school leaders to also develop processes that they could use to support other teachers and students. They reported the use of the action-planning model would be especially helpful of them in the future consistent with previous research (Praisner, 2003) which found that school leaders felt a framework for planning for diverse needs of students was important to help them support teachers.

### CONCLUSIONS

Teachers found that using the *Cycle of Learning* action-planning model in which they worked with mentors to employ a systematic to assess needs of students, identify individual student outcomes, and then identify and implement differentiated instructional practices was very effective in enabling them to translate theory into practice for students with diverse needs in their classrooms. In addition, improvements in students overall learning and personal skills was very pronounced in a short period of time which resulted in significant gains in social emotional as well as academic outcomes for these students. Teachers reported they really benefited from the chance to engage with school leaders and were supported through coaching. School leaders also improved their confidence and skills, and found the model to be extremely helpful in focusing their support for teachers on specific and meaningful issues.

### REFERENCES

- ACARA. (2012). *The shape of the Australian curriculum 4.0*. Retrieved from Retrieved from <http://acara.edu.au>.
- Bays, D.A., & Crockett, J.B. (2007). Investigating instructional leadership for special education. *Exceptionality: A Special Education Journal*, 15, 143-161. doi: 10.1080/09362830701503495
- Berzina, Z. (2011). School-based mentoring for professional development of inclusive school teachers. *Journal of Teacher Education for Sustainability*, 13, 72-83. doi: 10.2478/v10099-011-0006-0
- Bransford, J.B., Brown, A.L., & Cocking, R.R. (1998). *How people learn: brain, mind, experience, and school*. Hadleigh; Washington, D.C: National Academy Press.
- Brimijoin, K. (2005). Differentiation and high-stakes testing: an Oxymoron? *Theory into Practice*, 44, 254-261.
- Carrington, S., & Robinson, R. (2004). A case study of inclusive school development: a journey of learning. *International Journal of Inclusive Education*, 8, 141-153. doi: 10.1080/1360311032000158024
- Crosland, K., & Dunlap, G. (2012). Effective strategies for the inclusion of children with autism in general education classrooms. *Behavior Modification*, 36, 251-269.
- Harris, D.M. (2012). Varying teacher expectations and standards: Curriculum differentiation in the age of standards-based reform. *Education and Urban Society*, 44, 128-150. doi: 10.1177/0013124511431568
- Hattie, J. (2003). *Teachers make a difference: What is the research evidence?* Paper presented at the Australian Council for Educational Research annual conference on: Building teacher quality, University of Auckland.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.
- Hoppey, D., & McLeskey, J. (2010). A case study of principal leadership in an effective inclusive school. *The Journal of Special Education*, 46, 245-256. doi: 10.1177/0022466910390507
- Lawrence-Brown, D. (2004). Differentiated instruction: Inclusive strategies for standards-based learning that benefit the whole class. *American Secondary Education*, 32, 34-62.
- Marzano, R.J. (2007). *The art and science of teaching: a comprehensive framework for effective instruction*. Alexandria, Va: Association for Supervision and

- Curriculum Development.
- McTighe, J., & Brown, J.L. (2005). Differentiated Instruction and Educational Standards: Is Détente Possible? *Theory into Practice*, 44(3), 234-234-244.
- Ministerial Council on Education Employment Training and Youth Affairs (MCEETYA). (2008). Melbourne Declaration on Educational Goals for Young Australians. Melbourne: Curriculum Corporation.
- Moon, T.R. (2005). The Role of Assessment in Differentiation. *Theory into Practice*, 44, 226-233. doi: 10.1207/s15430421tip4403\_7
- Praisner, C.L. (2003). Attitudes of elementary school principals toward the inclusion of students with disabilities. *Exceptional Children*, 69, 135-145.
- Schumm, J.S., & Vaughn, S. (1991). Making adaptations for mainstreamed students: General classroom teachers' perspectives. *Remedial and Special Education*, 12, 18-27. doi: 10.1177/074193259101200404
- Scott, B.J., Vitale, M.R., & Masten, W.G. (1998). Implementing instructional adaptations for students with disabilities in inclusive classrooms. *Remedial and Special Education*, 19, 106-119.
- Scott, W., & Spencer, F. (2006). Professional development for inclusive differentiated teaching practice. *Australian Journal of Learning Disabilities*, 11, 35-44.
- Smit, R., & Humpert, W. (2012). Differentiated instruction in small schools. *Teaching and Teacher Education*, 28, 1152-1162. doi: 10.1016/j.tate.2012.07.003
- Tillman, L.C. (2005). Mentoring new teachers: Implications for leadership practice in an urban school. *Educational Administration Quarterly*, 41, 609-629.
- Tomlinson, C.A. (2005). Grading and differentiation: Paradox or good practice? *Theory into Practice*, 44, 262-269.
- Tomlinson, C.A., Brighton, C., Hertberg, H., Callahan, C.M., Moon, T.R., Brimjoin, K., & Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of the literature. *Journal for the Education of the Gifted*, 27, 119-145.
- Tomlinson, C.A., & Jarvis, J. (2009). Differentiation: Making curriculum work for all students through responsive planning and instruction. In J.S. Renzulli, E.J. Gubbins, K.S. McMillen, R.D. Eckert & C.A. Little (Eds.), *Systems and models for developing programs for the gifted and talented*. Storrs, CT: Creative Learning Press.