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Gifted Students' Views About Teachers' Desired Characteristics

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Abstract

The aim of this study was to determine gifted students' teacher preferences. It was designed using the survey model, with both quantitative and qualitative approaches. Participants of the study were 296 gifted students attending Science and Art Centres in the Turkish cities. Data was gathered using the Preferred Instructor Characteristics Scale and adapted into Turkish by the researchers of this study. The quantitative data was analysed through descriptive statistics, t-test and Kruskal Wallis H tests, whilst the qualitative data was analysed through descriptive analysis technique. According to the findings of the study, gifted students consider personal-social characteristics to be more important than cognitive-intellectual characteristics. Preferences of characteristics that students want their teachers to possess do not differ in terms of gender, but they do differ in terms of age and grade. Students stated that they prefer teachers who are interested in them, make the class pleasant and understand them. On the contrary; students expressed that angry, uninterested and boring teachers were the characteristics of an ineffective teacher.

Keywords: gifted students, teacher characteristics, science and art centres.

Introduction

Gifted individuals have the highest potential to play a significant role in a country's development. Giftedness is generally defined as having high abilities in particular field/fields which society's value (McIntosh, Dixon, & Pierson, 2012). In this context; a country's investment to gifted students is a big step to ensuring that country's future. This strategic significance of the issue shows that every effort must be made to successfully educate gifted students. Studies show that gifted students are more successful and motivated when they are taught according to their own learning styles and academic skills (Dunn & Milgram, 1993; Sak, 2004). Teachers and school managers can increase gifted students' success and motivation by taking gifted students' preferences into consideration as part of the educational process (Chae & Gentry, 2011). School managers and teachers should know and try to understand gifted students' requirements, otherwise those students may lose interest in school and fall into poor studying habits and display behavioural problems (Davison, 1996). One of the most significant factors is teacher's behaviours which can prevent students from improving themselves and focusing on learning activities (Edwards, 2007).

A teacher working with gifted students must determine the scope of mutual interaction and in-class activities, considering whether or not to meet students' requirements (Chamberlin & Chamberlin, 2010). There are new roles for teachers nowadays; teachers must leave their old roles behind which only required the transference of knowledge and must turn into guides offering the most suitable conditions for the students. This new role firstly requires closer relations compared to the past (Rosemarin, 2009, 53). Closer relations lead to closer interactions, but first of all, a teacher must have a wide range of characteristics; and these characteristics are classified in some studies as personal-social, cognitive-intellectual and pedagogical/classroom management (Eilam & Vidergor, 2011; Maddux, Samples-Lachmann, & Cummings, 1985). In other studies; pedagogical/classroom management is not classified as a different characteristic. Those characteristics consisting of interpersonal relations are analysed under the personal-social dimension, and the other characteristics such as knowledge and teaching methods are grouped under the cognitive-intellectual dimension (Dorhout, 1983; Rosemarin, 2009; Vialle & Tischler, 2005). Since the assessment instrument in this study had the same systematic approach, the same grouping was applied.

Whitlock and DuCette (1989), and Vialle and Tischler (2005) summarize former studies on this topic and state that certain personal-social characteristics, which a qualified teacher to the gifted should have, are enthusiasm, having insights about the needs of gifted students, having a sense of humour, self-confidence, dedicated to be a teacher to the gifted, being a facilitator, culturally responsive and willing to make mistakes. Examples of cognitive-intellectual characteristics are having a deep subject matter knowledge, being good at general knowledge, willing to improve themselves through research, and having above average intelligence (Vialle & Tischler, 2005, 2009; Whitlock & DuCette, 1989). Studies in different cultures with different samples may differentiate even though they have common teacher characteristics. For instance, Eilam and Vidergor (2011) found that culture is an important variable affecting gifted students' expectations from their teachers. To summarise, it is not possible to generalise studies across different cultures for all gifted students worldwide, so it is therefore necessary to apply the same research for different cultures.

Following the studies on whether or not some worldwide models about gifted education are applicable to Turkey, Science and Art Centres (BILSEM) were founded as a branch of the Turkish Ministry of Education (MoNE), Special Education and Consultation Department (Kazu & Senol, 2012). Science and Art Centres operate as independent special schools where gifted preschool, primary and secondary school students are taught in order to help realise their abilities, and improve and benefit from their maximum potential (MoNE, 2007). By 2012, there were 62 Science and Art Centres, covering most of the cities throughout Turkey (MoNE, 2012). However, the increase in quantity doesn't mean an increase in quality in all cases. For example, a study by Kucuk, Gokdere, & Cepni (2005) shows that teachers in Science and Art Centres are not self-conscious about gifted students and why their education is considered important. The criteria for teacher selection for Science and Art Centres are work performance, undertaking post graduate studies (Masters or PhD) in their respective field, gifted child education, or attending seminars and courses (MoNE, 2007).

Establishing education environments, which are well-matched to the culture and educational system, matters in terms of improvement of the gifted. It is also a matter of profound scientific research, but Turkey is already behind on this (Kucuk et al., 2005, p.84). It may be because of a misconception that gifted individuals are readily capable of matters independently (Sak, 2011a). Since 2000, there have been studies on not only gifted students, their teachers and Science and Arts Centres (BILSEM) (Altun & Yazici, 2010; Gokdere & Kucuk, 2003; Gokdere, Kucuk, & Cepni, 2003; Kazu & Senol, 2012; Kucuk et al., 2005; Sak, 2010, 2011a), but also education programme models tailored for gifted students (Sak, 2011b). In some of these studies, students were asked for some evaluations about their teachers, but there has been no study about their teacher preferences. This study has been designed to research gifted students' teacher preferences in Turkey. Within the scope of this primary goal, the following research questions are addressed;

- When taking both personal-social and cognitive-intellectual dimensions of teachers into consideration, which is of more importance to the gifted?
- Do gifted students' preferences change in terms of gender?
- Do gifted students' preferences change in terms of age?
- Do gifted students' preferences change in terms of class grade?
- What are the opinions of gifted students about good, effective and ineffective teacher characteristics?

Methodology

This study was designed using the survey model, with both quantitative and qualitative approaches. Data was gathered using the Preferred Instructor Characteristics Scale, developed by Krumboltz and Farquhar (1957), and adapted into Turkish by the researchers of this study. The participants of the study are 296 students attending Science and Art Centres in the Turkish cities of Aydin, Erzincan, Eskisehir and Isparta, who volunteered to be involved in the study. Some characteristics of the participants are as follows:

52.7% of the students are female (n=156) and 47.3% are male (n=140). Of the students, 8.1% of them were 9 years old or below (n=24), 18.2% were 10 years old (n=54), 35.1% were 11 (n=104), 14.2% were 12 (n=42), 14.9% were 13 (n=44), and 9.5% of them were 14 years or above (n=28). In terms of the student's class grade, 3.7% were attending the 2nd grade (n=11), 4.1% of them were 3rd grade (n=12), 6.8% were 4th grade (n=20), 45.9% were 5th

grade (n=136), 11.5% were 6th grade (n=34), 13.5% were 7th grade (n=40), 11.1% were 8th grade (n=33), and 3.4% of them were in the 9th grade (n=10). Finally, 42.2 % of the students were from the city of Eskisehir (n=125), 31.8% of them were from Erzincan (n=94), 16.9% from Isparta (n=50), and 9.1% of them were from Aydin (n=27).

Data was gathered by applying the Preferred Instructor Characteristics Scale, developed by Krumboltz and Farquhar (1957), and adapted into Turkish by the researchers of this study. First of all, the scale was translated into Turkish by two field experts with a good command of English and then separately by three English language experts. Then these five academicians came together and agreed on any differences in their translations. After that, the scale was then reviewed with three students (aged 8, 11 and 15) in order to establish if the items were clear and understandable to the target student age groups. The reliability of the study was determined with KR 21 (Kuder-Richardson Formula 21) and Split-Half techniques. KR 21 is a test which is used when the answers to questions consist of only two choices (Buyukozturk, 2009). According to the analysis, the KR 21 value was calculated to be 0.88, and the split half reliability coefficient, by using the Spearman and Brown formula, was calculated to be 0.86.

The scale has two parts. The first part consists of 36 items. Each item has two options; one referring to a personal-social and the other referring to a cognitive-intellectual attribute (for instance; I prefer a teacher who; makes the classroom pleasant / thinks logically). The participants are tasked with choosing which teacher characteristic they prefer over another for each of the 36 items. To be able to validate the findings from the first part, in the second part of the scale there are three open-ended questions about what qualities make a teacher good, effective, or ineffective.

For the analysis of the scale, participants are given one point for every personal-social characteristic they choose and a score of zero for every preference of a cognitive-intellectual teacher characteristic. Therefore, overall scores closer to 36 indicate a higher desire for personal-social characteristics, whereas scores closer to 0 indicate a higher desire for cognitive-intellectual characteristics. To be able to distinguish differences based on students' gender and age, t test and Kruskal Wallis H tests were conducted.

Descriptive analysis technique was used for the open-ended questions. First of all, frequencies were obtained by classifying students' answers as either personal-social or cognitive-intellectual. To strengthen the reliability of the classification, the list was shared with two experts in the field, and reshaped by consensus. The answers to the first and second questions (good & effective teacher characteristics) were evaluated together as they resembled or generally matched each other. Teacher characteristics obtained from the analysis differentiated greatly, so characteristics with frequencies less than five are excluded from the findings.

Findings

In this part, findings obtained from the analysis of both the quantitative and qualitative data are shown. Table 1 gives gifted students' teacher preferences according to the findings from quantitative analysis.

Table 1. Students' preferences of teacher characteristics

Teacher Characteristic	n	%
Cognitive-Intellectual	42	14.2
Personal-Social	254	85.8

According to the findings (Table 1), most of the students who completed the survey prefer teachers' personal-social characteristics rather than cognitive-intellectual characteristics. It can be seen that only 14.2 % of students prefer cognitive-intellectual characteristics. Table 3 shows the results of the t test performed to see if students' preferences change according to their gender.

Table 2. Students' teacher preferences by student gender

Gender	n	\bar{x}	S	sd	t	p
Female	140	26.48	7.07	294	0.022	0.98
Male	156	26.47	6.66			

According to Table 2, the opinions of gifted students do not vary at significant levels with regard to their gender [$t_{(294)}=0.022$; $p>.05$].

Table 3 shows the results of the Kruskal Wallis H test performed to see whether or not teacher preferences of gifted students change according to the students' class grade because "age groups" alone don't show a normal range.

Table 3. Students' teacher preferences by student age

Age	n	Mean	sd	χ^2	p	Difference
9 and below	24	106.48	5	15.62	0.01	9-10,11,12,13,14
10	54	154.08				11-13
11	10	138.60				13-14
12	42	159.01				
13	44	183.25				
14 and above	28	140.16				

According to Table 3 regarding teacher preferences according to students' ages, there is a significant difference between 9-year olds and below and the older students. There is also a significant difference between 11-year olds and 13-year olds, and also between 13-year olds and 14-year olds [$\chi^2_{(5)}=15.62$; $p=0.01$; $p<0.05$]. Findings show that 9-year old and below students prefer teachers having personal-social characteristics less than the older students. Similarly, 11-year old students prefer teachers having personal-social characteristics less compared to 13-year old students. In contrast, 13-year olds prefer personal-social characteristics more than 14-year olds.

Table 4 shows the results of the Kruskal Wallis H test performed to see whether or not teacher preferences of gifted students change according to their class grade, because "classroom groups" don't show a normal range.

Table 4. Students' teacher preferences by student class grade

Grade	n	Mean Rank	sd	χ^2	p	Difference
2	11	90.77	7	16.27	0.02	2-4,5,6,7,8,9
3	12	79.33				3-4,5,6,7,8,9
4	20	151.30				
5	136	151.28				
6	34	152.07				
7	40	171.00				
8	33	144.27				
9	10	163.35				

As seen in Table 4, there is a significant difference between 2nd and 3rd grade students and all upper grades [$\chi^2_{(7)}=16.27$; $p=0.02$; $p<0.05$]. Students in the 4th to 9th grades (inclusive) prefer teachers having personal-social characteristics more than 2nd and 3rd grade students. Only 3rd grade students prefer personal-social characteristic less than students in the 2nd grade.

Tables 5 and 6 show analysis of the answers given by gifted students to open-ended questions about the characteristics of good/effective and ineffective teachers.

Table 5. Students' opinions about characteristics of good/effective teachers

Personal-Social		Cognitive-Intellectual	
Behaviour	No. students	Behaviour	No. students
Interested in us	100	Teaches well	59
Makes the classroom pleasant	84	Covers all the material	44
Understands us	83	Thinks logically	38
Friendly	71	Expert	35
Amusing	60	Knows the theoretical background of his/her subject	23
Likes us	43	Knowledgeable	16
Cheerful	35	Instruction regarding our readiness levels	14
Tolerant	33	Personalized instruction	12
Humorous	26	Includes practice/ provides different activities	12
Dedicated to his/her students	22	Well-known in his/her field	10
Disciplined	20	Likes researching	10
Just	15	Well-prepared	10
Calm	13	Gives less homework	10
Conscientious	12	Hardworking	9
Helpful	12	Dedicated to his/her subjects	7
Patient	10	Experienced	6
Honest	10	Gives homework	6
Modest	9	Uses visual materials	6
Affectionate	9	Makes experiments	5

Personal-Social		Cognitive-Intellectual	
Behaviour	No. students	Behaviour	No. students
Objective	8		
Respectful	8		
Values our thoughts	5		
Totals	688		332

As can be seen in Table 5, students referred to 22 different personal-social and 19 cognitive-intellectual characteristics which good/effective teachers possess. Personal-social characteristic were mentioned 688 times, whereas cognitive-intellectual 332 times. Gifted students mostly prefer teachers who are interested in them (f=100), make the class pleasant (f=84), understand them (f=83), are friendly (f=71) and cheerful (f=60).

Examples of some characteristics not shown in the table (f=1-4) are; reformer (f=4), has a different point of view (f=2), interested in painting (f=1) and imaginative (f=1). When cognitive-intellectual characteristic are analysed students mostly like teachers who teach well (f=59), cover all the materials (f=44), think logically (f=38) are expert in their fields (f=23) and know theoretical background of their subjects (f=23). Some low frequency (f<5) cognitive-intellectual characteristics not shown in the table are uses body language well (f=3), likes reading (f=2), and speaks many languages (f=1).

Table 6. Students' opinions about characteristics of ineffective teachers

Personal-Social		Cognitive-Intellectual	
Behaviour	No. students	Behaviour	No. students
Angry	59	Not interested in the lesson	24
Not interested	42	Teaches badly	16
Boring	29	Only teaches	15
Shouts at us	25	Gives homework a lot	11
Intolerant	20	Busy with other things in class (mobile phone, computer)	11
Too strict	14	Doesn't have enough theoretical knowledge in his/her field	10
Discriminative	13	Teaches not very fluently	10
Irresponsible	11	Does not cover all the material	6
Not modest	10	Unprepared/unplanned	6
Sullen	9	Makes us write a lot	6
Belittles/ condescends	9	Doesn't come to class	5
Can't get along well with students /treats students badly or rudely	8	Can't think logically	5
Bullies	8		

Personal-Social		Cognitive-Intellectual	
Behaviour	No. students	Behaviour	No. students
Does not thinks like us	8		
Undisciplined	7		
Does not like students	7		
Unfriendly	6		
Unfair	5		
Ignores our opinions	5		
Totals	295		125

As it is seen in Table 6, students refer to 19 personal-social and 12 cognitive-intellectual characteristics which their teachers possess. Personal-social characteristics were mentioned 295 times, whereas cognitive-intellectual 161 times. Having analysed personal-social characteristics that gifted students mentioned, the most repeated ineffective teacher characteristics were angry ($f=59$), uninterested ($f=42$), boring ($f=29$), shouts at them ($f=25$) and intolerant ($f=20$). The answers uses much slang ($f=4$), selfish ($f=3$) and forgetful ($f=2$) had low frequencies ($f<5$), and therefore not shown in the table. Not interested in the lesson ($f=24$), teaches badly ($f=16$), only teaches ($f=15$), gives much homework ($f=11$) and interested in different things in the lesson ($f=11$) were the most repeated cognitive-intellectual characteristics of ineffective teachers. Late for the lesson ($f=4$), doesn't like the job ($f=2$) and doesn't make experiments ($f=1$) are some low frequency ($f<5$) cognitive-intellectual characteristic examples given by the students.

Conclusion and Discussion

Findings show that gifted students consider personal-social characteristics to be more important than cognitive-intellectual characteristics. It is seen that gifted students prefer personal-social characteristics more in studies about gifted students across different countries (Abel & Karnes, 1994; Dorhout, 1983; Maddux et al., 1985; Rosemarin, 2009; Vialle & Tischler, 2005). Preferences of characteristics that students want their teachers to possess do not differ in terms of gender. In Vialle and Tichler's (2005) research, no difference was found in Australian and Austrian gifted students' preferences in terms of gender, but American male students prefer personal-social characteristics more compared to the female students. In the study by Maddux et al. (1985), American female students prefer personal-social characteristics more compared to the male students. Dorhout (1983) and Abel and Karnes (1994) found no difference in terms of gender in their studies with American gifted students. When looking at the examples given, analyses with a gender variable are inconsistent, however the common preference by both genders are teachers with personal-social characteristics. The differences may be explained as cultural or features of sample groups. More studies on this variable could be conducted, or meta-analyses performed related to demographic features.

Gifted students' teacher preferences differ in terms of age and grade. As students get older and enter to the higher grades, personal-social characteristics are preferred more. Dorhout (1983) compared eight grades, from 5th to 12th, and found no significant difference. Rosemarin (2009) noted there was no difference between groups in her comparisons of 8-9, 10-11 and 12-13 year old age groups. However, in the study by Vialle

and Tischler (2005), it was seen that younger gifted students in lower grades prefer personal-social characteristics. This may be explained by the difference in expectancies of teachers by the students at different ages and from different cultures.

Open-ended questions were prepared to gain a deeper point of view about the results of survey. The findings show that personal-social characteristics were mentioned much more than cognitive-intellectual for both good/effective teachers and ineffective teachers. Students stated that they prefer teachers who are interested in them, make the class pleasant and understand them. In the study by Vialle and Tiscler (2005), similar results such as friendliness, sense of humour and understanding students were reached among the students who preferred personal-social characteristics. On the contrary; students expressed that angry, uninterested and boring teachers were the examples of an ineffective teacher.

All these results show that gifted students expect educational environments in which they can feel that teachers are interested in them and where they can have fun while learning. So during teacher training process, there should be activities enabling teacher candidates to improve their social, progressive, creative characteristics and plan extraordinary lessons. How games will be integrated to the lesson for every branch and how teacher candidates improve their social and communicative skills should be taught to teacher candidates. Educational activities should meet every individual's expectancies and this will make students feel that their teacher is interested in them individually. Teacher candidates should understand this point of view and improve skills on individualisation of teaching during their training. In the study by Hansen and Feldhusen (1994), it was seen that teachers trained to teach gifted students were more effective in terms of both teaching skills and class climate, compared to those not trained for the gifted. In the studies by Whitlock and DuCette (1989) and also Cheung and Phillipson (2008), it was seen that teachers who were somehow trained about gifted individuals possess the desirable characteristics necessary for education of the gifted. In this context, during the teacher training process, teacher candidates should be provided with opportunities to be able to develop abilities for gifted education. In addition, during the teacher selection process for gifted students, in coordination with teacher training process, methods should be provided to be able to measure these characteristics.

In this study, teacher characteristics have been described which gifted students expect from their teachers. Studies could be conducted to see whether or not gifted students preferences differ from non-gifted students. Teacher expectancies of gifted students in terms of their personality characteristics and skills variables are also worth of study.

Notes

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References

- Abel, T., & Karnes, F. A. (1994). Teacher preferences among the lower socioeconomic rural and suburban advantaged gifted students. *Roeper Review*, 17 (1), 52-57.
- Altun, F., & Yazici, H. (2010). Learning styles of the gifted students in Turkey. *Procedia: Social and Behavioral Sciences*, 9, 198-202.
- Buyukozturk, S. (2009). *Sosyal bilimler icin veri analizi el kitabi*. Ankara: Pegem Akademi.
- Chae, Y., & Gentry, M. (2011). Gifted and general high school students' perceptions of learning and motivational constructs in Korea and the United States. *High Ability Studies*, 22 (1), 103-118.
- Chamberlin, M.T., & Chamberlin, S. A. (2010). Enhancing preservice teacher development: Field experiences with gifted students. *Journal for the Education of the Gifted*, 33 (3), 381-416.
- Cheung, H.Y., & Phillipson, S.N. (2008). Teachers of gifted students in Hong Kong: Competencies and characteristics. *The Asia-Pacific Education Researcher*, 17 (2), 143-156.
- Davison, J. (1996). Meeting state mandates for gifted and talented: Iowa teacher preparation programs. *Roeper Review*, 19 (1), 41-43.
- Dorhout, A. (1983). Student and teacher perceptions of preferred teacher behaviors among the academically gifted. *Gifted Child Quarterly*, 27 (3), 122-125.
- Dunn, R., & Milgram, R. M. (1993). Learning styles of gifted students in diverse cultures. In R.M. Milgram, R. Dunn & G.E. Price (eds.), *Teaching and counseling gifted and talented adolescents: An international learning style perspective*, (3-24). USA: Praeger Publishers.
- Edwards, C. H. (2007). *Classroom discipline and management*. New York: John Wiley & Sons.
- Eilam, B., & Vidergor, H. E. (2011). Gifted Israeli students' perceptions of teachers' desired characteristics: A case of cultural orientation. *Roeper Review*, 33, 86-96.
- Gokdere, M., & Kucuk, M. (2003). Science education of gifted students at intellectual area: A case for science art centers. *Educational Sciences: Theory and Practice*, 3 (1): 118-124.
- Gokdere, M., Kucuk, M., & Cepni, S. (2003). Gifted science education in Turkey: Gifted teachers' selection, perspectives and needs. *Asia Pacific Forum on Science Learning and Teaching*, 4 (2), Article 5.
- Hansen, J. B., & Feldhusen, J. F. (1994). Comparison of trained and untrained teachers of gifted students. *Gifted Child Quarterly*, 38 (3), 115-121.
- Kazu, I.Y., & Senol, C. (2012). Views of teachers about gifted curriculum (Case of BILSEM). *E-International Journal of Educational Research*, 3 (2), 13-35.
- Krumboltz, J., & Farquhar, W. (1957) The effect of three teaching methods on achievement and motivational outcomes in a how to study course. *Psychological Monographs*, 71 (14), 1-26.
- Kucuk, M., Gokdere, M., & Cepni, S. (2005). Difficulties of Turkish science gifted teachers: Institutions of science and art centers. *Relieve*, 11 (1), 83-98.
- Maddux, C.D., Samples-Lachmann, I, & Cummings, R.E. (1985). Preferences of gifted students for selected teacher characteristics. *Gifted Child Quarterly*, 29 (4), 160-163.
- McIntosh, D.E., Dixon, F.A., & Pierson, E.E. (2012). Use of intelligence tests in the evaluation of gifted students. In D. Flanagan & P. Harrison (Eds.), *Contemporary Intellectual Assessment: Theories, Tests, and Issues* (3rd ed., 623-642). Guilford Publishers: New York.

- MoNE [Ministry of National Education]. (2007). Milli Egitim Bakanligi Bilim ve Sanat Merkezleri Yonergesi /online/. Retrieved on 14th June 2012 from http://mevzuat.meb.gov.tr/html/2593_0.html.
- MoNE [Ministry of National Education]. (2012). Milli Egitim Istatistikleri (Orgun Egitim) 2011-2012. Retrieved on 14th June 2012 from <http://sgb.meb.gov.tr/www/milliegitim-istatistikleri-orgun-egitim-2011-2012/icerik/68>.
- Rosemarin, S. (2009). Who is the best teacher? Do different kinds of students have different preference? *Gifted Education International*, 25 (1), 48-55.
- Sak, U. (2004). A synthesis of research on psychological types of gifted adolescents. *The Journal of Secondary Gifted Education*, 15 (2), 70-79.
- Sak, U. (2010). Educational programs and services for gifted students in Turkey. In C.J. Maker & S.W. Schiever (eds.), *Curriculum development and teaching strategies for gifted learners* (3rd ed., 432–441). Austin, TX: Proed.
- Sak, U. (2011a). Prevalence of misconceptions, dogmas, and popular views about giftedness and intelligence: A case from Turkey. *High Ability Studies*, 22 (2), 179-197.
- Sak, U. (2011b). An overview of the social validity of the education programs for talented students model (EPTS). *Education and Science*, 36, 213-229.
- Vialle, W., Tischler, K. (2005). Teachers of the gifted: A comparison of students' perspectives in Australia, Austria and the United States. *Gifted Education International*, 19 (2), 173-181.
- Vialle, W., Tischler, K. (2009). Gifted students' perceptions of the characteristics of effective teachers. In D. Wood (Eds.), *The gifted challenge: Challenging the gifted*, 115-124. Merrylands, Australia: NSWAGTC Inc.
- Whitlock, M.S., & DuCette, J.P. (1989). Outstanding and average teachers of the gifted: A comparative study. *Gifted Child Quarterly*, 33 (1), 15-21.