

# 國立臺灣師範大學特殊教育學系學生 出席國際學術研討會論文發表心得報告

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筆者在郭靜姿教授的組團帶領之下，於 2 月 12 日至 2 月 14 日在沙烏地阿拉伯的首都—利雅德（Riyadh），出席由沙烏地阿拉伯身心障礙資優協會（Aleradah Org. for Talented People with disabilities）辦理「第二屆雙重特教需求研討會」（The Second International Conference on Twice Exceptionality, ICTE2023），以下筆者將記錄此次出席研討會的觀察，並進行反思。

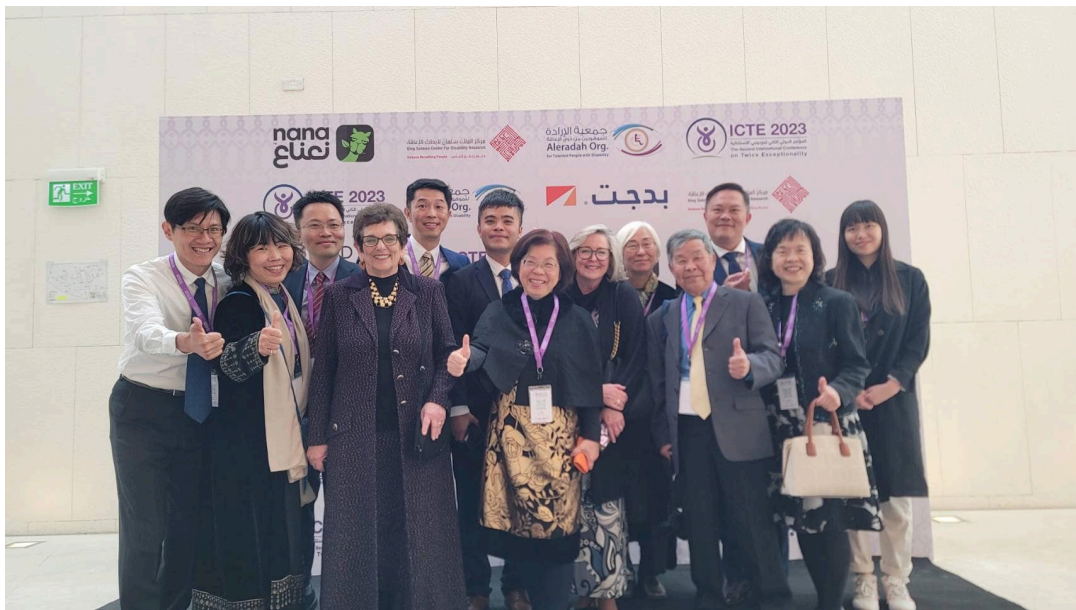


圖 1：本次出席 ICTE 2023 的臺灣論文發表者，與 Susan Baum（前排左三）合影

## 一、國家級跨部會對於雙重特教需求議題的重視

這場研討會主辦單位是沙烏地阿拉伯的身心障礙資優協會，特別關注身心障礙者的才能發展。從會場中不同的攤位就可以了解，有自閉症青少年中心、助聽器公司、身心障礙成人的就業組織，也有大學提供女性發展的課程等等，從這次的研討會，就可以發現沙烏地阿拉伯是很關注身心障礙者的發展，尤其

因為沙烏地阿拉伯王儲對此議題的重視，促使特殊教育學者與相關組織的大力支持。從研討會開幕式出席的貴賓就可以了解國家對於身障資優議題的重視，特別邀請沙烏地阿拉伯人力資源及社會發展部的部長（**Minister of Human Resources and Social Development**）致詞，並就雙重特教需求的支持進行分享，這個研討會也是該政府機關所支持，顯見沙烏地阿拉伯政府對身心障礙且有才能者的關注。

除上述之外，研討會也邀請到城市與鄉村事務部部長（**Minster of Municipal Rural Affairs and Housing**）（這個我想應該是跟臺灣的內政部相近），也在大會的邀請下進行分享，從大會安排國家的兩位部長級的人物，對雙重特教需求的支持進行研討，這個部分令筆者反思到，或許臺灣除了教育部的重視外，也該有跨部會的整合，從身心障礙者的才能發展角度進行思考，或許更能回應身心障礙者權利公約（**CRPD**）的精神。

這場研討會的開幕式除了邀請部長的與會外，大會也邀請具有音樂才能的視障者演唱，更在開幕式的尾聲，邀請視障沙畫藝術家當場創作，並搭配自閉症學生進行現場的鋼琴演奏，令人耳目一新。

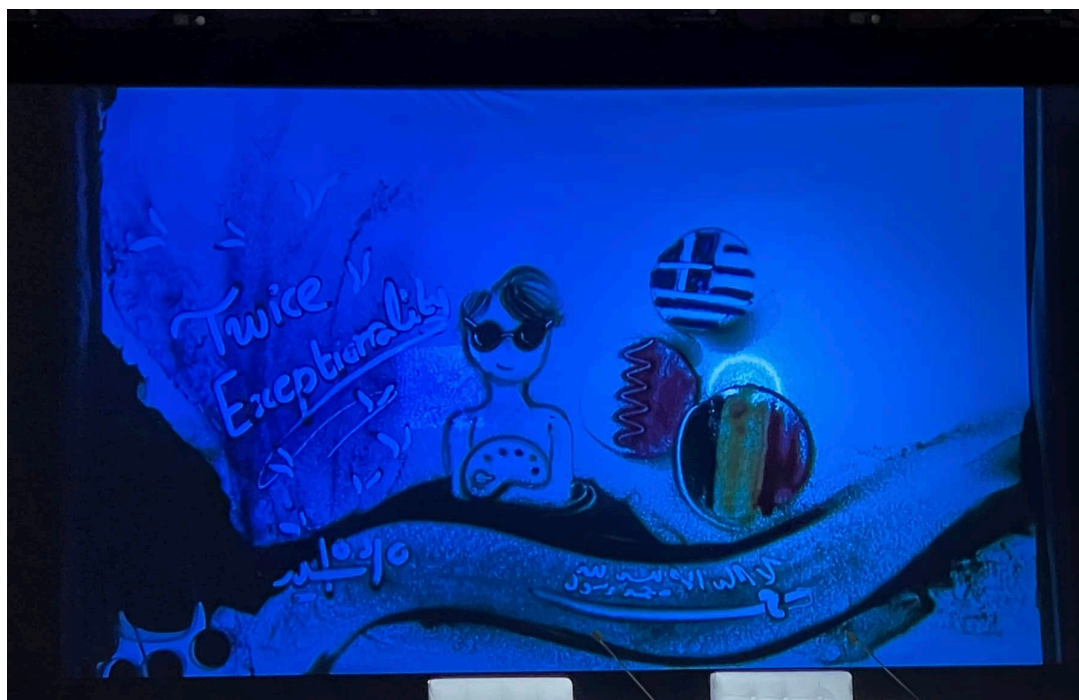


圖 2：ICTE 2023 開幕式由視障沙畫藝術家的作品

## 二、雙重特教需求亟需執行科學與實證本位的介入

本次的研討會共安排主要的五場專題講座（keynote speech），以及數場專題論壇，出席的專家學者來自美國、臺灣、埃及、加拿大、歐盟、沙烏地阿拉伯等國家，以下將彙整幾場令筆者印象深刻，且值得我們學習的場次進行反思。

### （一）特殊教育不只是修補，也要發展孩子的才能

第一場的專題演講邀請到 Susan Baum，這是第二次聽她的演講（第一次是 2020 年師大特教中心辦理的研討會，當時因疫情，只能線上參與），一如上次的分享，Dr. Baum 除了提到「藍色」（挑戰）+「黃色」（優勢）=「綠色」，在「綠色」（雙重特教需求）裡，是非常不簡單的，她也提供許多實務上的策略，不管是閱讀障礙資優、自閉症資優或是 ADHD 資優，其實有一個關鍵的信念，「特殊教育不只是修補（fix），也要發展孩子的才能（talent）」，第二次聽 Dr. Baum 的演講，還是有許多的學習。



圖 3：「藍色」（挑戰）+「黃色」（優勢）=「綠色」（筆者繪製）

### （二）不只是 2e，還有第三個 e

第二場專題演講邀請到 Dr. Elena Grigorenko，她以「雙特孩子與成人：事實與虛構」（2e kids (and adults): facts and fictions）為主題進行分享。從 Dr. Grigorenko 的介紹來看，她有兩個博士學位，分別從俄羅斯的莫斯科州立大學，專攻認知心理學，以及美國的耶魯大學，主修發展心理學，並從 Fielding

University 取得臨床心理師的資格，目前兼任多所學校的教職，在學術上，發表超過 600 篇期刊論文、書的章節等。此次 Dr. Grigorenko 從許多文獻進行討論，特別著重在雙重特教需求的歷史、定義，並提供她對雙特的想法，以下擷取她分享中最讓我印象深刻的部分：

- 美國目前有 385000 位雙特學生，她認為這樣的數字太高，因為缺乏有系統性的鑑定方式，導致雙特學生人數過高。除此之外，在美國，學校老師大多關注學生的弱勢（挑戰），而非關注學生的優勢，更覺得他們不可能是資優。
- 除了 2e 學生外，她提出 3e 的概念，第三個 e 表示為「特殊的環境」（exceptional conditions），她舉出黑人或拉丁裔等低代表性的資優群體，若本身也是雙重特教需求學生，就會成為 3e。
- 目前雙特的研究多以個案研究居多，未來的議題包括「雙特的操作性定義」、「鑑定」與「服務」。目前做的比較好的包括雙特學生在融合環境的學習、關注公平正義，以及積極回應雙特學生、家長的需求。但是，她也提出有幾個不足之處，包括「缺乏雙特的操作性定義」、「在研究上缺乏科學的研究」，以及「在服務上缺乏實證本位（evidence-based）且系統性的介入」。

### （三）提供雙特學生優勢才能發展的舞臺

第三場的 keynote speech 是本系的郭靜姿教授，以「在大學培養自閉症資優學生的才能」（Nurturing talented students with autism spectrum disorders at university）為題，介紹從 2012 年以來，老師與團隊在師大的雙特方案與研究。從許多個案的才能發展歷程來看，透過課程、方案與輔導，學生都有很好的發展，更提供雙特學生優勢才能發展的舞臺。與會者對老師的分享都覺得非常的感動，並且提供很好的回應與回饋！



圖 4：本系郭靜姿教授的專題演講

#### (四) 一所提供雙特學生學習的學校—FLEX SCHOOL

這次出席研討會，才發現原來美國有一所專門服務雙重特教需求學生的學校 Flex School，大會特別邀請這所學校的創辦人 Jacqueline Byrne 進行分享。從這所學校的網頁介紹來看，Flex School 是一所私立的中學（包含國中與高中），特別提供雙重特教需求學生支持與學習，透過學生的優勢與需求，提供個別化的服務。Flex School 有三個不同的校區，包括紐澤西的 Berkeley Heights、紐約的 Bronxville，以及創辦於 2015 年的線上虛擬雲端教室，提供雙特學生全面的線上學習。

從這所學校的網頁介紹可以發現，他們的課程多元，不只有學科領域，還有很多特殊才能相關的課程提供給學生學習，更重視學生的生涯發展與課外活動等。如果未來有機會，或許可以更進一步了解這所學校的運作方式。

#### 三、論文發表：學校本位的雙重特教需求方案

這次一起到沙烏地阿拉伯與會的，包括大學教授，以及臺灣的國小、國中及高中老師，共有 8 篇論文進行發表，分別在 2 月 13 日（場次一）與 2 月 14 日（場次二）的下午 12 時 30 分至 13 時 30 分，一個場次計有 4 篇發表。

筆者以「Meeting the needs of twice-exceptional students: school-based programs from New Taipei City」為題進行分享，主要是以新北市三所學校的雙特方案進行分享，從學校本位的角度，提供校內雙特學生才能發展的課程與輔導，筆者為了解三所學校的師長如何提供雙特學生學習，訪談三所學校的校本團隊。

三所學校有不同的背景，A 校（國小）設有身心障礙資源班與資優資源班，A 生為數學才能優異的自閉症資優學生；B 校（國小）只有身心障礙資源班，但申請教育局的資優教育方案，提供 B 生優勢才能課程，B 生的優勢在於空間能力，可以只用一張紙（不用任何的膠水），摺出不同的恐龍。而 C 校為特殊教育學校，C 生目前為高一自閉症且智能障礙學生，僅有仿說的口語能力，但卻能透過畫筆，彩繪出自己的想法，透過繪畫，學校師長慢慢的引導學生有不同的學習機會。



圖 5：筆者於大會進行論文發表



圖 6：論文發表後，與大會學術委員會主席 Dr. Abdullah Al-Jaghiman（左四）合影

#### 四、其他值得學習的部分

這場研討會，除上述的專題演講、專題論壇外，也邀請科技公司進行分享，從科技提供雙特學生的幾個方向，包括「輔助科技」、「社會溝通工具」、「遊戲」、「個人化學習」，以及「可及性」，這也讓筆者反思到，我們在雙特學生的輔導與教學上，也應該更重視「科技」相關的議題，是未來值得探究的方向。

另外，此次辦理研討會的單位為沙烏地阿拉伯的身障資優協會，所以，也邀請許多家長、師長，以及身心障礙且具有特殊才能者進行分享，例如邀請帕運的傑出運動員 Ibrahim Hamatou 進行分享，雖然是以阿拉伯語言分享，不過，透過翻譯機，也令人動容與欽佩。

## 五、結語

此次阿拉伯的學術之旅前，我們一行人先進行文化之旅的參訪，除了在研討會前抵達沙烏地阿拉伯的首都利雅德，發現當地人的友善與好客，更利用幾天時間參訪了阿拉伯聯合大公國的杜拜（Dubai）。筆者特別要以參觀杜拜畫框（The Dubai Frame）的所思所感，做為本次出席會議的結語。

2018 年竣工的杜拜畫框（The Dubai Frame），雖然在設計與建造階段出現爭議，但仍是值得探訪的作品。杜拜畫框矗立在 Zabeel Park 上，斥資超過 13 億，這座 50 層樓高的杜拜畫框，希冀能把杜拜的「過去」與「未來」重新表達（reframe）。杜拜畫框的發想從「黃金比例」出發，一面呈現杜拜的過去，一面探究杜拜的未來。一進入杜拜畫框，映入眼簾的是過去的杜拜，是沙漠與駱駝，在領導者的帶領下，希望能在把阿拉伯聯合大公國建造成「世界上最好的國家之一。」螢幕上的文字，「競爭會讓你更加強壯且更好，畏懼將會導致更弱」（Competition always makes you stronger and better. It is feared only by the weak.）這是曾任杜拜酋長，現為阿拉伯聯合大公國副總統兼總理 Sheikh Mohammed bin Rashid Al Maktoum 的想法，顯見領導人的遠見是如此的重要。杜拜畫框不只是網紅拍照的景點，它更是具有創意的作品。在杜拜的未來，我想正如 Sheikh Mohammed bin Rashid Al Maktoum 的這段文字，「我們或許不會活 100 年，但創意的作品卻可以在我們身後成為傳奇」（We may not live for a hundred years, but the products of our creativity can leave a legacy long after we are gone.）

筆者思考，或許身為教育工作者，就是努力的在教學現場，不只是雙重特教需求學生，也要看見每一位學生的需求，進而培養他們的才能，或許，這些學生也可能會創造出令人讚嘆的創意作品。



# **Meeting the needs of twice-exceptional students: school-based programs from New Taipei City**

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## **Abstract**

'Twice exceptionality' (henceforth referred to as 2e) is used to refer to the phenomenon of gifted or talented individuals who simultaneously have learning difficulties or disabilities (Baum & Schader, 2020). The purpose of this study is to investigate the needs of twice-exceptional students in school-based programs based on RtI model in New Taipei City, Taiwan. This study explored the process and the content of teaching and counseling provided for twice-exceptional students by a team of teachers consisting of a regular classroom teacher, a disability resource room teacher, and a giftedness resource room teacher. In this study, a multiple-case study was implemented. The data were collected through semi-structured interviews, related documents and the researcher's notes. Data were analyzed qualitatively by thematic analysis.

The results of the study indicated that the steps of the cooperative process of team-teaching for twice-exceptional students in school are:

1. Scheduling and adjusting courses through formal IEP and IGP meetings;
2. Immediate management of problematic behaviors by resource class or gifted class teachers, and then further counseling and consulting will be arranged;
3. The gifted class teacher takes the lead in development of students' potential;
4. In addition to formal meetings, the team also cooperates and coordinates through

occasional case meetings, face-to-face interviews, and phone interviews.

The author will present some cases from the school-based programs for 2e students and demonstrate that the strategies for serving twice-exceptional students include addressing students' strengths and interests; providing appropriate social and emotional support; offering adaptations for academic strengths and accommodations for learning needs; and creating a supportive, safe, problem-solving culture that values the success of every student. In addition, the challenges in the school-based program will also be presented.

**Keywords:** Twice-Exceptional, School-based Programs, Case Study

## Introduction

In recent years, there has been increasing attention on twice-exceptionality (henceforth referred to as 2e) and individuals with 2e. However, our knowledge about the condition and the population is still quite limited due to the complexity of the phenomenon and the heterogeneity of the group. 2e is used to refer to the phenomenon of gifted or talented individuals who simultaneously have learning difficulties or disabilities (Baum & Schader, 2020). We define 2e as “giftedness coexisting with a disability in at least one developmental area, both of which are evidenced by professional assessment and require special support services” (Atmaca & Baloğlu, 2022).

Assessment techniques, interventions, or educational approaches developed solely for giftedness or disability are not adequate for individuals with 2e (Assouline et al., 2009; Cederberg et al., 2018; Foley-Nicpon et al., 2017). Therefore, we need a new conceptual framework that considers both giftedness and disability together to accurately identify and effectively intervene with these individuals. In addition, proper identification of individuals with 2e may be the most crucial step in developing the best educational programs for the population (Foley-Nicpon & Kim, 2018).

However, providing services to 2e students is also a crucial issue. Response to Intervention (RtI) recognized the impact on 2e (Trail, 2011), and considered the educational needs of children with gifts and talents and their families, particularly related to the identification of children considered to be twice exceptional because they have gifts and talents as well as a disability (Council for Exceptional Children, 2008). In Sum, RtI can function as a comprehensive system of classroom

interventions to meet a variety of student needs, including those of gifted students and 2e. Pereira, Knotts, & Roberts (2015) conducted an online questionnaire to examine state legislation and policy related to twice-exceptional learners in the United States. One of the results found was the need for collaboration among general, gifted, and special education professionals in school. In Taiwan, Chau (2020) conducted a study to investigate school-based programs that had adopted the multitiered concept of the RtI model, which was developed to improve schools' treatment of gifted students with autism spectrum syndrome. She developed three models according to the needs of the students based on their strengths and weaknesses, special education class types, and intervention tiers, including the intervention service model of dual-type three tiers, single-type three tiers, and single-type two tiers.

The purpose of this study is to investigate the needs of twice-exceptional students in school-based programs based on RtI model in New Taipei City, Taiwan. This study explored the process and the content of teaching and counseling provided for twice-exceptional students by a team of teachers consisting of a regular classroom teacher, a disability resource room teacher, and a giftedness resource room teacher.

## **Research Methods**

### **1. Participants**

This study mainly explored the needs of twice-exceptional students in school-based programs. A multiple-case study was implemented. Three schools were invited to participate in this study (see Table 1 for a summary). School A is an elementary school. Case A is Grade 6 now, identified as Autism Spectrum Disorder

(ASD) with emotional disorder. Case A has high concentration and logical thinking ability in the field of information scratch courses, maker clubs, and mathematical problem solving. School B is an elementary school. Case B is Grade 6 now, identified as ASD. Case B has a talent for spatial ability, and he is good at origami. Case A and B are twice exceptional students in inclusive education. However, School C is a special education school. It provides adolescents with special needs an opportunity for educational and vocational training. Case C is Grade 10 now, identified as ASD with intellectual disability. He has a talent for painting but employs a non-meaningful form of verbal imitation.

**Table 1.** Summary of the 2e students.

School/ Case	Educational Stage	Grade/ Age	Disability	Gifted/ Talent
A	Elementary School	Grade 6	ASD with emotional disorder	Math
B	Elementary School	Grade 6	ASD	spatial ability
C	Special School	Grade 10	ASD with intellectual disability	painting

In order to investigate the needs of these twice-exceptional students, we invited different teachers to participate in this study according to the special needs of each student. The participants involved the 2e students' regular classroom teachers, disability resource room teachers, and giftedness resource room teachers from the three schools (see Table 2 for a summary). In addition to the consent solicited during the recruiting stage, we sought their consent at the beginning of

each interview and acknowledged their right to stop the interview at any time without cause.

**Table 2.** Summary of the Participants.

<b>School</b>	<b>Interviewee</b>	<b>Code</b>
<b>School A</b>	regular classroom teacher	A-RT
	disability resource room teacher	A-DT
	giftedness resource room teacher	A-GT
<b>School B</b>	regular classroom teacher	B-RT
	disability resource room teacher	B-DT
<b>School C</b>	Principal	C-P
	regular classroom teacher	C-RT
	disability resource room teacher	C-DT

## **2. Data Collection and Interview Procedure**

The data were collected through semi-structured interviews, related documents and the researcher’s notes. Initial semi-structured interview questions were created by the researcher. The interviews occurred in November and December of 2022. After receiving consent from participants, the researcher would send the preliminary interview questions to the participants prior to the interview. Each of the participants was interviewed on Google Meet and informed that the interview would be audio recorded and kept anonymous. The interviews were transcribed verbatim for data analysis.

## **3. Data Analysis**

Given the large amount of textual data generated, the researcher adopted computer-assisted analysis for organizing, indexing, and categorizing data. Data were

analyzed qualitatively by thematic analysis. During the initial stage of data analysis, a preliminary framework was developed, which helped the researcher organize the key data.

## **Results and Discussion**

### **1. The steps of the cooperative process of the teaching team for twice-exceptional students in school**

The results of the study indicated that the steps of the cooperative process of team-teaching for twice-exceptional students in school are: Scheduling and adjusting courses through formal IEP and IGP meetings; Immediate management of problematic behaviors by resource class or gifted class teachers, and then further counseling and consulting will be arranged; the gifted class teacher takes the lead in development of students' potential; In addition to formal meetings, the team also cooperates and coordinates through occasional case meetings, face-to-face interviews, and phone interviews.

### **2. Multitiered School- Based Program for 2e students had positive effects**

These results are supportive of Chau's (2020) multitiered school-based program model, which was designed according to the needs of the students based on their strengths and weaknesses, special education class types, and intervention tiers.

The strategies for serving twice-exceptional students include addressing students' strengths and interests; providing appropriate social and emotional support; offering adaptations for academic strengths and accommodations for learning needs; and creating a supportive, safe, problem-solving culture that values the success of every student.

### **3. The challenges in the school-based program for 2e students**

The challenges in the school-based program for 2e students include the lack of interdisciplinary competence of teachers, difficulties in designing the course to suit students' strengths and weaknesses, difficulties in determining the tiered orders and indicators, excessively heavy manpower burden, insufficient time to cooperate, and difficulties in suitably matching intervention times and homogenous small groups. Similarly, Chen et al. (2022) pointed out that gifted education teachers are involved in developing students' talents, and an effective support system with manpower and financial assistance from government is essential for closing opportunity gaps and meeting the needs of both twice exceptional learners and teachers. However, we need to understand which specific types of educational interventions will help develop these students' talents and which special education and gifted education instructional strategies may enable them to address their disabilities and develop their abilities.

### **Conclusion**

This study investigated the needs of twice-exceptional students in school-based programs, according to the needs of the students based on their strengths and weaknesses, special education class types, and intervention tiers. Based on a strength-based approach, the analysis focused on the participants' opinions. In sum,



the participants revealed that strategies for serving twice-exceptional students include addressing students' strengths and interests; providing appropriate social and emotional support; offering adaptations for academic strengths and accommodations for learning needs; and creating a supportive, safe, problem-solving culture. They also revealed that the lack of interdisciplinary competence of teachers is a crucial issue. We need more attention on the needs of 2e students. It is hoped that this study will provoke thoughts and further actions with regard to promoting the well-being of 2e individuals.

## References

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