

Perception of Disability: Motricity-oriented education routes and inclusivity-based research perspectives

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Abstract

Many education scholars consider motricity aggregating and inclusive (Bertagna, 2005; Block & Vogler, 1994; Goodwin & Watkinson, 2000; Moliterni, 2013). It helps all students to develop specific motor and relational skills and non-special-needs students to manage special needs effectively (Slininger, Sherrill, & Jankowski 2000). These positive aspects also have their impact on PE teachers according to their individual views of disability and special needs (Papadopoulou, Kokaridas, Papanikolaou, & Patsiasouras, 2004; Tripp & Rizzo, 2006). However, teacher attitude towards a special-needs student does influence day-to-day teaching and learning. The special-needs teacher's perception of disability is an important inclusivity factor that could make educational practice difficult, as class design needs constant adaptation and change. The paper presents an important educational experience at the University of Reggio Calabria, Italy, as we worked on our future special-needs teachers' perception and consequent management of inclusivity through motricity knowledge acquisition, with a view to designing and practicing more and more inclusive processes.

Keywords: physical education, inclusivity, inclusive processes, perception, education, special-needs teacher.

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Special-needs Teacher Training in the Italian School System

D.P.R. (Italian President's Decree) no. 970 of 31st October 1975 triggered the designing of the first educational routes for special-needs teachers, which has paved the way for the first Masters' courses.

Since 1986/1987, these two-year Masters' courses for special-needs teachers have become multi-functional, as they certify a manifold specialization in the psycho-physical and sensory areas of learning.

O.M. (Italian Ministry of Public Education Ordinance) no. 185 of 17th March 1997 discontinued the aforesaid courses, pending the definition of the educational scheme of the Inter-University Specialization School for Secondary Education teacher (D.P.R. 31st July 1996, no. 470) and of the Graduate Course in Primary Education Science (D.P.R., 31st July 1996, no. 471), designed for the new teacher training courses in Italian Universities. Intensive 1-year courses were designed to train redundant teachers in certain special skills (Law no. 662 of 22nd December 1996).

After 20 years of successive training courses for special-needs teachers, Law no. 104 of 5th February 1992 stressed the importance of specific university education, which set a new frontier in teaching and training.

Art. 4 of D.M. 26th May 1998 would later allow for the design of a 2-year 400-period sandwich course within the SSIS (Italian Secondary Education Training School) scheme, whereby permanent teachers could even qualify for alternatively teaching special-needs students. 80-period-a-year specialization courses would later be designed for permanent teachers wishing to qualify for single specific skills in special-needs teaching.

Only 2 years later would D.M. of 20th February 2002 authorize specialized Inter-University Secondary-Education schools to design 800-period special-needs courses for qualified permanent secondary-school teachers. The crucial innovation concerning these 2-year graduate courses is the introduction of lab-based teaching.

The 2002 D.M. authorized Universities to design school programs and syllabi and to start Primary-Education Science degree courses and SSIS programs based on Inter-University agreements.

Another change for SSIS and the University degree courses for primary-school teachers consists in having envisaged 400 periods for special-needs education. For the first time in Italian schooling history have specialization school activities and university degree courses envisaged School-University integration and the consequent introduction of new professions.

Law no. 53 of 28th March 2003 changed the School and University scenario even further by establishing general education rules and basic performance levels in education and training. Art. 5 of the aforesaid law

specifically deals with teacher training and lists the rules concerning the basic training of teachers to take place at university, namely in 5-year Degree courses.

On 26th November 2019, the Italian Public Education Ministry (MIUR) issued a paragraph concerning the training of teachers on special-needs for 2019/2020, which stresses the importance of disabled student inclusivity in line with what the Italian Constitution has already stated (Art. 33, 33, 34). The paragraph specifies that all teachers throughout the education process must be specifically qualified and trained on inclusivity-based objectives, methods, procedures, routes and strategies.

This extremely variegated and constantly changing scenario implicitly stresses the paramount importance of training for teachers to build up their specific professional skills. Special-needs teachers are constantly called upon to perform new tasks which go far beyond the traditional Italian view of education. Not only are they to provide knowledge, but also have to foster the full acquisition of individual resources and professional skills.

Motricity and Inclusivity: a prerequisite for research

As Sibilio and Gomez Paloma stated in 2004, motricity has always been considered a theoretical and practical pillar in the training of special-needs teachers-to-be. Motricity has enjoyed the influence of a new approach to plural cross-disciplinary educational research (*Ibidem*).

The special nature of motricity has contributed to dismantling the socio-cultural barriers that had long hindered the expression of different skills and cultures. Motion-based activities enjoy an inherent inclusivity potential – they are basically univocal.

Teaching motricity must be considered a strategy that fosters the development of inclusivity-oriented processes whereby each student expresses their own specific skills and gets fulfillment out of that.

Teaching the body to move is to be considered an opportunity to learn how to use a strategy that supports special-needs students and improves their motion skills. The body is the subject of human learning and a great opportunity for special-needs students to fully enjoy their residual motion skills.

These considerations on the role of the body in cognitive processes must entail new training strategies for special-needs teachers, whose professional topic-oriented skills become the prerequisite for a basic cultural evolution that should lead to their concrete inclusivity-based growth.

Investigating our future teachers' perception of disability and special-needs students entails obtaining feedback on their attitudes and learning whether teacher thought and behavior do or do not influence course design (Pinnelli & Fiorucci, 2019). So, if a special-needs teacher or a PE teacher considers a disabled student generally inadequate for whatever physical activity, it will be extremely difficult for them to plan a lesson that should include all students.

So, university training courses for future specialized teachers must include the aforesaid aspects, lest some ideas and/or action schemes should be reproduced which would jeopardize all students' inclusivity.

As various international studies have evinced (Robinson, 2017; Sharma & Nuttal, 2014), teachers' positive attitudes toward special-needs students are crucial to the success of inclusivity. This is also true of PE teachers, whose attitudes strictly depend on their positive/negative view of disability (Papadopoulou, Kokaridas, Papanikolaou, & Patsiasouras, 2004; Tripp & Rizzo, 2006). These attitudes even influence their lesson plan and conduction, as well as their response to inclusivity (Jeong & Block, 2011).

Studies by Pocock e Miyahara (2018) evince some difficulties teachers meet while trying to realize social inclusivity in planning and practicing motor activities. Among these, we can find: a) the degree of student involvement in class, which often entails a drastic divide between special-needs and non-special-needs students; b) PE teacher expectations on special-needs students, which are lesser than on non-special-needs students; c) PE lessons themselves, where most of the emphasis is placed on learning physical skills to the detriment of social inclusivity.

There are positive aspects as well, though. Other research has witnessed PE teachers interact with specialists, parents, special-needs students and even fellow teachers to improve their own lessons and develop fruitful cooperation networks (Pocock & Miyahara, 2018). Yet other research featured PE teachers using cooperative learning as an effective educational support (Grenier, 2006).

Objective

The object of the exercise was basically working on our future teachers' perception of disability to design inclusivity-based processes through the acquisition of specific motricity notions. So, motricity has been a unifying instrument for us to understand, through feelings and beliefs, which teacher attitudes are inclusive and which are not.

Methodology

The study involved a significant cross-section of about 150 special-needs teaching trainees from the University of Reggio Calabria, Italy, in the 2018/2019 academic year. A questionnaire was also administered to assess how teacher perception of inclusivity would influence inclusivity-based teaching practice. A correlation with the trainee's motricity knowledge was investigated as well (Altomari, Sgambelluri, & Straniero, 2020).

This testing instrument helped us identify the main dimensions related to the special-needs teacher's perception of a special-needs student's body during motricity classes and how the perception affects class practices and strategies.

The questionnaire was administered at the end of a Special-Needs Teacher Training Course which entailed prior specific motricity-lab-teaching activities (Beery, 1997; Galifret-Granjon, 1980; Henderson & Sugden, 1992), whereby trainees had been able to appreciate the inclusivity-oriented nature of motricity.

Following the existing literature (Theodorakis, Bagiatis, & Goudas, 1995; Kudlaeek, Válková, Sherrill, & Myers, 2002; O'Brien, Kudlaček, & Howe, 2009), three scales were considered which were meant to gauge a) *teacher perception of physical disability*, b) *the importance of inclusivity*, c) *the teacher's active and inter-active skills*.

More specifically:

- the *disability perception* scale enables us to investigate teachers' actions and perceptions and helps teachers reflect more effectively on the most appropriate attitudes to nourish towards disability and avoid any anti-inclusivity attitudes;
- the *importance of inclusivity* scale gauges the degree of inclusivity of motor- and sensory-disabled students which teachers wish to assert within their motricity classes, in line with what was stated by the European Agency for Development in Special Needs Education in 2009 (whereby inclusivity is seen as a universal educational approach), as well as what had been stated even earlier at the UN Convention on the Rights of Persons with Disabilities in 2006 (our obligation to safeguard the rights of the disabled within a behavioral scenario where personal features are seen in a sort of social relationship with the environment);
- the *teacher skill* scale aims at gauging the level of active intervention, participation and interaction that teachers show in PE classes to include motor- and sensory-disabled students and improve their life quality.

Discussion

The questionnaire has yielded the following results:

- a) The first scale (physical disability perception) reveals the teacher's clear difficulty trying to design adequate lessons with all students, whether they are disabled or not. This data is in line with the literature, whereby teachers usually find it awkward to adapt or modify activities just to include special-needs students;
- b) the second scale (the importance of inclusivity) shows a generally high degree of agreement, i.e. it is important to adequately modify educational routes to design inclusive lessons. This data too is in line with some international studies featuring a type of teacher who takes good care to gather information on their own students (An, Meaney, 2015), make the necessary changes to adjust what is being planned to the need of bringing the disabled into a successful inclusivity-oriented educational scenario (Simpson & Mandich 2012);
- c) also the third scale (teacher skill) reveals the teachers' determination to improve the life quality of special-needs students at school. The literature on the topic shows that fostering significant interactions between and among peers does help students feel part of a single and sole prejudice-free context, which can be achieved by building small groups and promoting cooperative learning (Goodwin & Watkinson, 2000; Grenier, 2006; Johnson, Johnson, & Holubec, 1994). Not only does this hold good for peer groups, but also for creating a social support network of inclusivity specialists, such as educators, psychologists, ordinary school teachers, special-needs teachers, headmasters and other positions at school (An & Meaney, 2015).

Resorting to cooperative learning arises from our awareness that, to create an inclusive environment, one educational methodology must perforce be considered which simultaneously involves everyone without neglecting anyone of the participants, respects individual diversities and avoids individualized routes. Building a cooperative environment makes for the scientific evolution of group work, so it is the group that works if and when it does, because it is the group that enables the structuring of a real form of cooperation.

After Booth and Ainscow's indications (2002), great emphasis must be placed on motricity in cooperative learning, as it is a possible facilitator bound to increase everybody's accessibility and participation.

Conclusions and Further Perspectives

Educational research focused on the importance of motricity at school has shown greater and greater impact on the professional significance of the teaching job (Perla, 2016) and on the importance of adequately training special-needs teachers-to-be.

Practising motricity at school enables students to fully express their own potential in an integrative learning environment whereby the teacher's main task is to design educational procedures through a flexible approach tailored to each single pupil.

As some scientific studies (Gomez Paloma & Damiani, 2015) emphasize the role of the human body in teaching and learning, special-needs training classes should take full advantage of the transversal nature of motricity.

Exclusive discriminatory dynamics concerning special-needs students in PE classes at school deserve our critical attention.

So, designing inclusive educational action in a motricity-oriented environment means distancing ourselves from all those practices still based on an epistemologic interpretation of the deficit, whereby differences are seen as the product of faulty conditions centred solely on the individual.

Educational action designed according to this normative ability-centred body view witnesses an absolute overlapping identification of disability with deficit. Conversely, inclusivity-centred thinking erases this oversimplification and places disability within the realm of context-produced disabling processes, as was stated during the aforesaid UN Convention in 2006.

So, a future research route within the university training of special-needs teachers should allow for the creation of an inclusivity-oriented school in line with the *Universal Design for Learning* model (Rose & Meyer, 2002) for building educational routes suitable for everybody. The basic idea behind it should not be the personalization of educational action to meet "special" needs; it should be the careful tailoring of educational schemes to the abilities of each student, whether disabled or not.

Training future competent special-needs teachers, however, entails preparing an appropriate context and building viable educational routes which not only feature motricity, but also allow for a new way of interpreting and combining all these approaches to improve university training.

We hope this questionnaire will pave the way for interesting educational routes to be scientifically argued for or against throughout Italy.

It would be ideal to have co-building, co-designing, co-assessing moments which could lead to creating a research protocol for numerous Italian Universities to share.

References

- Altomari, N., Sgambelluri, R., & Straniero, A. (2020). Percezione e agire inclusivo a scuola nelle attività di Educazione Fisica. Risultati di una indagine esplorativa. *Italian Journal of Special Education for Inclusion* (1), pp. 434-450. Doi: 10.7346/sipes-01-2020-30.
- An, J., & Meaney, K. S. (2015). Inclusion practices in elementary physical education: A social cognitive perspective. *International Journal of Disability, Development and Education*, 62(2), pp. 143-157. Doi: 10.1080/1034912X.2014.998176.
- Beery, K. (1997). *The Beery-Buktecnica Developmental Test of Visual-Motor Integration: VMI with Supplemental Developmental Tests of Visual Perception and Motor Coordination: Administration, Scoring and Teaching Manual*. Parsippany, NJ: Modern Curriculum Press.
- Bertagna, G. (2005). *Scuola in movimento. La pedagogia e la didattica delle scienze motorie e sportive*. Milano: FrancoAngeli.
- Block, M.E., & Vogler, E.W. (1994). Inclusion in regular physical education: the research base. *Journal of Physical Education, Recreation, and Dance*, (65), pp. 40-44. Doi: 10.1080/07303084.1994.10606830.
- Booth, T., & Ainscow, M. (2002). *Index for Inclusion: Developing Learning and Participation in Schools*. UK: Wide Bay Resource Centre.
- D.M. del 26 maggio 1998. Criteri generali per la disciplina da parte delle università degli ordinamenti dei Corsi di laurea in scienze della formazione primaria e delle Scuole di specializzazione all'insegnamento secondario «testo disponibile al sito: <http://attiministeriali.miur.it/anno-1998/maggio/dm-26051998.aspx>», consultato in data 6/10/2021.
- D.M. del 20 febbraio 2002. SSIS - Corso handicap 800 ore «testo disponibile al sito: <https://www.edscuola.it/archivio/norme/decreti/dm20202.html>», consultato in data 6/10/2021.
- D.P.R. 31 luglio 1996, n.471. Regolamento concernente l'ordinamento didattico del corso di laurea in scienze della formazione primaria «testo disponibile al sito: https://www.gazzettaufficiale.it/atto/serie_generale/caricaDettaglioAtto/originario?atto.dataPubblicazioneGazzetta=1996-09-12&atto.codiceRedazionale=096G0497&elenco30giorni=false», consultato in data 6/10/2021.
- D.P.R. 31 luglio 1996, n.470. Regolamento concernente l'ordinamento didattico della scuola di specializzazione per la formazione degli insegnanti della scuola secondaria «testo disponibile al sito:

- <https://www.normattiva.it/atto/caricaDettaglioAtto?atto.dataPubblicazioneGazzetta=1996-09-12&atto.codiceRedazionale=096G0496>», consultato in data 6/10/2021.
- D.P.R. 31 ottobre 1975, n. 970 (GU 21 aprile 1976, n. 104). Norme in materia di scuole aventi particolari finalità. «testo disponibile al sito: http://www.edscuola.it/archivio/norme/decreti/dpr970_75.html», consultato in data 6/10/2021.
- European Agency for Development in Special Needs Education (2009). «testo disponibile al sito: <https://www.european-agency.org/>», consultato in data 6/10/2021.
- Galifret-Granjon, N. (1980). *Batteria Piaget-Head: test di orientamento destra-sinistra*. Firenze: Giunti.
- Goodwin, D.L., & Watkinson, E.J. (2000). Inclusive physical education from the perspective of students with physical disabilities. *Adapted Physical Activity Quarterly*, (17), pp. 144-160. Doi: 10.1123/apaq.17.2.144.
- Gomez Paloma, F., & Damiani, P. (2015). *Cognizione corporea, competenze integrate e formazione dei docenti. I tre volti dell'Embodied Cognitive Science per una scuola inclusiva*. Trento: Erickson.
- Grenier, M. (2006). A Social Constructionist Perspective of Teaching and Learning in Inclusive Physical Education. *Adapted Physical Activity Quarterly* 23, pp. 245-260. Doi: 10.1123/apaq.23.3.245.
- Henderson, S. E., & Sugden, D. A. (1992). *Movement Assessment Battery for Children*. San Antonio, TX: The Psychological Corporation.
- Jeong, M., & Block, M. E. (2011). Physical Education Teachers' Beliefs and Intentions Toward Teaching Students With Disabilities. *Research Quarterly for Exercise and Sport*, 82(2), pp. 239-246. Doi: 10.1080/02701367.2011.10599751.
- Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1994). The nuts and bolts of cooperative learning. Interaction Book Company. Tr. It. Johnson D.W., Johnson R.T., Houbec E.J., *Apprendimento cooperativo in classe*. Trento: Erickson.
- Kudláček, M., Válková, H., Sherrill, C., & Myers, B. (2002). An inclusion instrument based on planned behavior theory for prospective physical educators. *Adapted Physical Activity Quarterly*, 19(3), pp. 280-299. Doi: 10.1123/apaq.19.3.280.
- Legge n. 662 del 22 dicembre 1996. Misure di razionalizzazione della finanza pubblica «testo disponibile al sito: <https://www.gazzettaufficiale.it/eli/id/1996/12/28/096G0686/sg>», consultato in data 6/10/2021.
- Legge n.104 del 5 febbraio 1992. Legge-quadro per l'assistenza, l'integrazione sociale e i diritti delle persone handicappate «testo disponibile al sito: <https://www.gazzettaufficiale.it/eli/id/1992/02/17/092G0108/sg>», consultato in data 6/10/2021.
- Legge n.53 del 28 marzo 2003. Delega al Governo per la definizione delle norme generali sull'istruzione e dei livelli essenziali delle prestazioni in materia di

- istruzione e formazione professionale «testo disponibile al sito: <https://www.gazzettaufficiale.it/eli/id/2003/04/02/003G0065/sg>», consultato in data 6/10/2021.
- MIUR, Ordinanza 17 marzo 1997 (GU n.112 del 16-5-1997). Sospensione, per l'anno scolastico 1997-98, delle procedure di nuovi riconoscimenti dei corsi statali e non statali di specializzazione per insegnanti di sostegno di cui all'ordinanza ministeriale 6 maggio 1996, n. 169. (Ordinanza n. 185). «testo disponibile al sito: https://www.gazzettaufficiale.it/atto/vediMenuHTML?atto.dataPubblicazioneGazze tta=1997-05-16&atto.codiceRedazionale=097A3696&tipoSerie=serie_generale&tipoVigenza=o riginario», consultato in data 6/10/2021.
- MIUR, Formazione docenti per le attività di sostegno e tutor a.s. 2019-2020. Assegnazione delle risorse finanziarie e progettazione delle iniziative formative. «testo disponibile al sito: <https://www.miur.gov.it/web/guest/-/personale-docente>», consultato in data 6/10/2021.
- Moliterni, P. (2013). *Didattica e scienze motorie. Tra mediatori e integrazione*. Roma: Armando.
- O'Brien, D., Kudlaček, M., & Howe, P. D. (2009). A contemporary review of English language literature on inclusion of students with disabilities in physical education: A European perspective. *European Journal of Adapted Physical Activity*, 2, pp. 46-61. Doi: 10.5507/euj.2009.004.
- ONU (2006). *Convenzione sui Diritti delle Persone con Disabilità*. New York: Nazioni Unite.
- Papadopoulou, D., Kokaridas, D., Papanikolaou, Z., & Patsiaouras, A. (2004). Attitudes of Greek physical education teachers toward inclusion of students with disabilities. *International Journal of Special Education*, 19 (2), pp. 104-111.
- Perla, L. (ed.) (2016). *La professionalità degli insegnanti. La ricerca e le pratiche*. Lecce:Pensa MultiMedia.
- Pinnelli, S., & Fiorucci, A. (2019). Disabilità e inclusione nell'immaginario di un gruppo di insegnanti in formazione. Una ricerca sulle rappresentazioni. *MeTis. Mondi educativi. Temi, indagini, suggestioni*, 9(1), pp. 538-556. Doi: 10.30557/MT00080.
- Pocock, T., & Miyahara, M. (2018). Inclusion of students with disability in physical education: a qualitative meta-analysis. *International Journal of Inclusive Education*, 22(7), pp. 751-766. Doi: 10.1080/13603116.2017.1412508.
- Robinson, D. (2017). Effective Inclusive Teacher Education for Special Educational Needs and Disabilities: Some More Thoughts on the Way Forward. *Teaching and Teacher Education* 61(1), pp. 164-178. Doi: 10.1016/j.tate.2016.09.007.
- Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal Design for Learning*. Alexandria, VA: ASCD.
- Sharma, U., & Nuttal, A. (2014). The Impact of Training on Pre-Service Teacher Attitudes, Concerns, and Efficacy Towards Inclusion. *Asia-Pacific Journal of Teacher Education* 44(2), pp. 142-155. Doi: 10.1080/1359866X.2015.1081672.

- Sibilio, M., & Gomez Paloma, F. (2004). *La formazione universitaria del docente di educazione fisica. Le nuove frontiere dell'educazione attraverso il corpo*. Napoli: Ellissi.
- Simpson, K., & Mandich A. (2012). Creating inclusive physical education opportunities in elementary physical education. *Physical & Health Education Journal*, 77(4), pp. 18-21.
- Theodorakis, Y., Bagiatis, K., & Goudas. M. (1995). Attitudes toward teaching individuals. *Adapted physical activity quarterly*, 12(2), pp. 51-160. Doi: 10.1123/apaq.12.2.151.
- Tripp, A., & Rizzo, T. (2006). Disability Labels Affect Physical Educators. *Adapted Physical Activity Quarterly*, 23(3), pp. 310-326. Doi: 10.1123/apaq.23.3.310.